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L Number	Hits	Search Text	DB	Time stamp
1	84	direct adj answer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/19 15:11
2	35	(unstructured with source) with (search query)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/19 15:11
3	655	question and direct with answer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/19 15:12
4	339	question with direct with answer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/19 15:12
5	36	(question with direct with answer) and 707/\$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/19 15:12
-	3500	data with warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/18 15:17
-	1651	(data with warehouse) and central\$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/18 15:17
-	9	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (structured and unstructured) with source	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/18 15:20
-	30	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (natural with language)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/18 15:20
-	2	(direct adj answer) and warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/18 18:09
-	14	(direct adj answer) and natural with language with (query or question)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/18 18:19
-	0	((direct adj answer) and warehouse) and central\$3 with (store repository)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/18 18:19
-	1	((direct adj answer) and natural with language with (query or question)) and central\$3 with (store repository)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/18 18:19
-	6	("5781190"   "5805824"   "5983268"   "6298342"   "6317738"   "6341288").PN.	USPAT	2003/12/18 18:51

-	1	"6523022" and (sort\$3 or rank\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:15
-	328	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:15
-	185	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (sort\$3 or rank\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:16
-	62	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (sort\$3 or rank\$3) with result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:20
-	10	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (combine) with result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:18
-	3	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (sort\$3 or rank\$3) with result) and (((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (combine) with result)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:18
-	53	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (sort\$3) with result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:30
-	3	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (sort\$3 and rank\$3) with result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:20
-	34	((data with warehouse) and central\$5) and (multipl\$4 or plural\$4) with source) and (sort\$3) near result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:50
-	50	data adj warehouse and (sort\$3) near result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:42
-	45	(data adj warehouse and (sort\$3) near result) and (multipl\$4 or plural\$4) with (database site source)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:34
-	2563	direct adj answerand (sort\$3) near result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:50
-	3	direct adj answer and (sort\$3) near result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/19 13:50
-	9	(US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.	USPAT; US-PGPUB	2003/12/19 13:51

-	5	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and direct with answer	USPAT; US-PGPUB	2003/12/19 13:52
-	0	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and direct with answer) and (sort\$) with result	USPAT; US-PGPUB	2003/12/19 13:51
-	2	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and direct with answer) and (sort\$)	USPAT; US-PGPUB	2003/12/19 13:51
-	2	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and direct with answer) and (sort\$)	USPAT; US-PGPUB	2003/12/19 13:52
-	5	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and direct with answer	USPAT; US-PGPUB	2003/12/19 13:52
-	2	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and direct with answer) and (sort\$)	USPAT; US-PGPUB	2003/12/19 15:34
-	1457	data adj warehouse	USPAT; US-PGPUB	2003/12/19 15:35
-	118	(data adj warehouse) and (image video or audio) with (repostitory or database)	USPAT; US-PGPUB	2003/12/19 16:14
-	46	((data adj warehouse) and (image video or audio) with (repostitory or database)) and combine	USPAT; US-PGPUB	2003/12/19 16:13
-	1626	data near2 warehouse	USPAT; US-PGPUB	2003/12/19 16:13
-	121	(data near2 warehouse) and (image video or audio) with (repostitory or database)	USPAT; US-PGPUB	2003/12/19 16:16
-	15	((data near2 warehouse) and (image video or audio) with (repostitory or database)) and natural with language	USPAT; US-PGPUB	2003/12/19 16:30
-	16	("5367621"   "5408655"   "5455945"   "5506984"   "5517407"   "5530852"   "5544354"   "5550746"   "5557794"   "5577241"   "5586260"   "5630117"   "5644686"   "5761683"   "5781909"   "5787448").PN.	USPAT	2003/12/19 16:23
-	10	(search or query) with warehouse and (search or query) with ((external with source) third adj party)	USPAT; US-PGPUB	2003/12/19 16:31
-	116	(structured with source) and (unstructured with source)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 09:50
-	22	((structured with source) and (unstructured with source)) and warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:01

-	0	((unstructured with source) with (search query)) and datawarehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:03
-	9	((unstructured with source) with (search query)) and warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:03
-	3	((unstructured with source) with (search query)) and warehouse with (query search)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:05
-	25365	(external or second\$3) with database	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:06
-	28908	warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:06
-	1221	((external or second\$3) with database) and warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:07
-	20741	database with (video image audio)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:07
-	591	(external or secondary) with database with (video image audio)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:08
-	0	((external or secondary) with database with (video image audio)) and (search or query) with (warehouse and database)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:10
-	0	((external or secondary) with database with (video image audio)) and (search or query) with warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:10
-	158	((external or secondary) with database with (video image audio)) and (search or query) with database	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:10
-	33	((external or secondary) with database with (video image audio)) and (search or query) with database and (first and second) with (search or query)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:11
-	42	((external or secondary) with database with (video image audio)) and (first and second) with (search or query)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:21
-	1909	image with database and text with database	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:21

-	172	(image with database and text with database) and (first and second) with search	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:22
-	19	((image with database and text with database) and (first and second) with search) and warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:23
-	0	search with centralized with (repository or store or mart) and (search with warehouse)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:57
-	386	search with (central\$4 with (repository or store or mart) warehouse)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:58
-	96	(search with (central\$4 with (repository or store or mart) warehouse)) and ((external or second) with search)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 10:59
-	12	((search with (central\$4 with (repository or store or mart) warehouse)) and ((external or second) with search)) and natural with language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:07
-	534	(search or query) with (warehouse)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:42
-	15115	(search or query) with (internet or web)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:31
-	158	((search or query) with (warehouse)) and ((search or query) with (internet or web))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:12
-	32	((search or query) with (warehouse)) and ((search or query) with (internet or web)) and natural with language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:12
-	1097	(search or query) with (external) with (source site database)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:41
-	23	((search or query) with (warehouse)) and ((search or query) with (external) with (source site database))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:32
-	393	(search or query) near3 (external) near2 (source site database)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:42
-	119	(search or query) near2 (warehouse)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:42

-	0	((search or query) near3 (external) near2 (source site database)) and ((search or query) near2 (warehouse))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:42
-	89	((search or query) near3 (external) near2 (source site database)) and central with (repository or database or site)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:43
-	7	((search or query) near3 (external) near2 (source site database)) and central with (repository or database or site) with query	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:45
-	7	((search or query) near3 (external) near2 (source site database)) and central with (repository warehouse or database or site) with query	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 11:45
-	600	central with (repository warehouse or database or site) with query	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:21
-	150	( central with (repository warehouse or database or site) with query) and second with (search or query)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:21
-	19	(( central with (repository warehouse or database or site) with query) and second with (search or query)) and (combin\$3 or integrat\$3) with result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:21
-	605	central\$3 with (repository warehouse or database or site) with query	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:21
-	52	( central\$3 with (repository warehouse or database or site) with query) and (combin\$3 or integrat\$3) with result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:29
-	150	( central\$3 with (repository warehouse or database or site) with query) and second with (search or query)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:22
-	19	(( central\$3 with (repository warehouse or database or site) with query) and (combin\$3 or integrat\$3) with result) and second with (search or query)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:26
-	0	(( central\$3 with (repository warehouse or database or site) with query) and (combin\$3 or integrat\$3) with result) and second with (search or query) not ((( central with (repository warehouse or database or site) with query) and second with (search or query)) and (combin\$3 or integrat\$3) with result)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:25
-	1	(( central\$3 with (repository warehouse or database or site) with query) and (combin\$3 or integrat\$3) with result) and unstructured	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:27

-	52	( central\$3 with (repository warehouse or database or site) with query) and (combin\$3 or integrat\$3 merg\$3) with result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT; US-PGPUB	2003/12/20 12:29
-	15	(US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:29
-	10	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and natural with language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:30
-	5	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and natural with language) and warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/20 12:30
-	15	(US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.	USPAT; US-PGPUB	2003/12/21 15:07
-	14	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and time	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:07
-	42391	time with (search or query)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:07
-	10	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and time) and (time with (search or query))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:09
-	0	((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and time) and (time with (search or query))) and timeout	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:07



-	0	((((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and time) and (time with (search or query))) and time with limit	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:08
-	1	((((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and time) and (time with (search or query))) and time with out	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:08
-	7	((((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.) and time) and (time with (search or query))) and search near4 time	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:18
-	13975	timeout	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:18
-	60	timeout and stop near3 (search or query)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:28
-	1	(timeout and stop near3 (search or query)) and warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:52
-	2	(timeout and stop near3 (search or query)) and natural with language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:22
-	24	(timeout and stop near3 (search or query)) and (multipl\$4 or plural\$4) with (source database)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:29
-	484	search near4 time and stop near3 (search or query)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:29
-	91	(search near4 time and stop near3 (search or query)) and (multipl\$4 or plural\$4) with (source database)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:31
-	6	((search near4 time and stop near3 (search or query)) and (multipl\$4 or plural\$4) with (source database)) and natural with language	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:29
-	2	((search near4 time and stop near3 (search or query)) and (multipl\$4 or plural\$4) with (source database)) and warehouse	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:33

-	34	(search near4 time and stop near3 (search or query)) and threshold near3 time	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:53
-	29845	707/\$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:53
-	83	(search near4 time and stop near3 (search or query)) and 707/\$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:53
-	8	((search near4 time and stop near3 (search or query)) and 707/\$) and threshold near3 time	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:56
-	9	("5555403"   "5832221"   "5832481"   "5842009"   "5893125"   "5920854"   "5950190"   "6119101"   "6366923").PN.	USPAT	2003/12/21 15:55
-	282167	no with result	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:57
-	87701	no near2 (result answer)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 15:57
-	16	((search near4 time and stop near3 (search or query)) and 707/\$) and (no near2 (result answer))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 16:01
-	67	(no near2 (result answer)) and (search or query) near5 (timeout time adj out)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 16:02
-	1	((no near2 (result answer)) and (search or query) near5 (timeout time adj out)) and 707/3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 16:02
-	9	((no near2 (result answer)) and (search or query) near5 (timeout time adj out)) and 707/\$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 17:57
-	0	6523022.pn. and meta adj data	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 17:58
-	1	6523022.pn. and index	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 18:39
-	19810	no with answer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 18:48

-	17	(US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$ or US-6304864-\$ or US-6513031-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.	USPAT; US-PGPUB	2003/12/21 18:39
-	7	(no with answer) and ((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$ or US-6304864-\$ or US-6513031-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 18:39
-	4	((no with answer) and ((US-6625617-\$ or US-6523022-\$ or US-6076088-\$ or US-6263335-\$ or US-5987454-\$ or US-6240416-\$ or US-6493692-\$ or US-5956720-\$ or US-5802518-\$ or US-5864871-\$ or US-6304864-\$ or US-6513031-\$).did. or (US-20030177111-\$ or US-20020111934-\$ or US-20010037328-\$ or US-20010039493-\$ or US-20020120651-\$).did.)) and (query search) with (internet or web)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 18:49
-	1112	no with answer and 707/\$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 18:49
-	195	(no with answer and 707/\$) and (query search) with (internet or web)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 18:49
-	5	((no with answer and 707/\$) and (query search) with (internet or web)) and pre-select\$3 with (source database)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 18:51
-	18	(question and direct with answer) and answer with ("not" no) with database	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 19:00
-	6	(question and direct with answer) and answer with (search or query) with (database and (internet or web))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 19:05
-	6	no adj answer same (search or query) with (database and (internet or web))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 19:05
-	1	5920856.pn. and (sort or rank)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/12/21 19:44

File 275:Gale Group Computer DB(TM) 1983-2004/Aug 18  
          (c) 2004 The Gale Group  
 File 621:Gale Group New Prod.Annou.(R) 1985-2004/Aug 18  
          (c) 2004 The Gale Group  
 File 636:Gale Group Newsletter DB(TM) 1987-2004/Aug 18  
          (c) 2004 The Gale Group  
 File 16:Gale Group PROMT(R) 1990-2004/Aug 18  
          (c) 2004 The Gale Group  
 File 160:Gale Group PROMT(R) 1972-1989  
          (c) 1999 The Gale Group  
 File 148:Gale Group Trade & Industry DB 1976-2004/Aug 18  
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          (c) 2004 McGraw-Hill Co. Inc  
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          (c) 2004 ProQuest Info&Learning  
 File 647:CMP Computer Fulltext 1988-2004/Aug W2  
          (c) 2004 CMP Media, LLC  
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          (c) 2004 IDG Communications  
 File 696:DIALOG Telecom. Newsletters 1995-2004/Aug 17  
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          (c) 2004 PR Newswire Association Inc

Set	Items	Description
S1	28581	NATURAL()LANGUAGE
S2	495036	(DIRECT OR ONE OR SINGLE OR SOLITARY OR LONE OR BEST OR HI- GHEST)(2W)(ANSWER OR REPLY OR RESPONSE OR RECORD OR ITEM OR E- NTRY OR DATA OR FILE OR DOCUMENT OR ARTICLE OR PAGE OR WEBPAGE OR SITE OR WEBSITE OR OBJECT)
S3	153456	(MOST OR RELEVANT OR APPROPRIATE)(2W)(ANSWER OR REPLY OR R- ESPONSE OR RECORD OR ITEM OR ENTRY OR DATA OR FILE OR DOCUMENT OR ARTICLE OR PAGE OR WEBPAGE OR SITE OR WEBSITE OR OBJECT)
S4	89550	S2:S3(7N)(RETRIEV? OR OBTAIN??? OR PROVID? OR PROVISION OR RETURN??? OR FORWARD??? OR SEND??? OR SENT OR TRANSFER??? OR - DELIVER??? OR MAIL??? OR EMAIL??? OR DISPLAY??? OR PRESENT??? OR SHOW???)
S5	3117261	DATABASE? ? OR DATA()(BASE? ? OR WAREHOUSE? ?) OR REPOSITO- R??? OR LIBRAR??? OR SEARCH()ENGINE? ? OR QUER????
S6	169	S1(40N)S4(40N)S5
S7	89	RD (unique items)
S8	69	S7 NOT PD>20010418
S9	13609	FREE()FORM
S10	39	S9(40N)S4(40N)S5
S11	25	RD (unique items)
S12	20	S11 NOT (S8 OR PD>20010418)

marketer, working as representative of the developers, to collaborate on each area. The friction between the editor and marketer would produce, at a minimum, a diverging look and feel based on the tools we used.

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COMPANY NAMES: Netscape Communications Corp.--Finance  
DESCRIPTORS: Company Sales/Revenue; Web Browser  
SIC CODES: 7372 Prepackaged software  
TICKER SYMBOLS: NSCP  
TRADE NAMES: Netscape Navigator (Web browser)--Purchasing  
FILE SEGMENT: CD File 275

8/9/6 (Item 6 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

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01575370 SUPPLIER NUMBER: 15053364

**Integrating natural language processing and information retrieval in a troubleshooting help desk. (DEC AI Technology Center develops Stars full-text query system for on-line support services) (artificial intelligence) (AI in Corporate Service and Support)**

Anick, Peter G.

IEEE Expert, v8, n6, p9(9)

Dec, 1993

ISSN: 0885-9000

LANGUAGE: ENGLISH

RECORD TYPE: ABSTRACT

ABSTRACT: DEC has developed a **natural language** interface for its rapidly growing customer support on-line **database**. The DEC AI (artificial intelligence) Technology Center has worked with the DEC Stars full-text **query** system group to interview users about their on-line searching habits and improve the linguistic components of the **search engine**. The AI group found that users preferred precision searching, where **one** suitable **article** turned up, rather than **retrieving** many loosely related articles. The AI group developed a prototype system with **query** windows and menu bars that accessed articles indexed on citation form. The prototype was demonstrated and user feedback revealed the need for a dynamic, rather than static lexicon. This involved another design phase, where the lexicon was layered on top of the AI-Stars Collection Services storage and indexing module, rather than a standard relational database.

COMPANY NAMES: Digital Equipment Corp.--Information services  
DESCRIPTORS: Natural language interfaces; Information Storage and Retrieval; Customer Service; Support Services; User Need; Case Study  
SIC CODES: 3571 Electronic computers; 3577 Computer peripheral equipment, not elsewhere classified; 7375 Information retrieval services  
TICKER SYMBOLS: DEC  
FILE SEGMENT: AI File 88

8/9/7 (Item 7 from file: 275)

DIALOG(R) File 275:Gale Group Computer DB(TM)

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01519952 SUPPLIER NUMBER: 12200990 (THIS IS THE FULL TEXT)

**Occam's Muse. (Occam Research Corp.'s Muse data analysis software package) (Software Review) (Products) (Evaluation)**

Morgan, Brian

DBMS, v5, n6, p28(1)

June, 1992

DOCUMENT TYPE: Evaluation ISSN: 1041-5173

LANGUAGE: ENGLISH

RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 936 LINE COUNT: 00073

ABSTRACT: Occam Research Corp's Muse data analysis software package for Apple's Macintosh combines multidimensional spreadsheets, **natural - language queries**, good charting and graphing capabilities, and a functional method for rearranging data. The \$695 package uses data

retrieved from relational or flat-file **databases** by other products; it was tested on a Macintosh IIx using more than 1Mbyte of data imported from a relational SQL **database** retrieved by the Clear Access package. Muse is based on a **natural - language query** tool that is accessed through a script window; data is **returned** as either a **single response** to the script window or as an array into a Workbook, which is used to retrieve, manipulate, analyze and load data. The package's features are particularly useful for analysis of large multirecord data, although it requires considerable learning.

#### TEXT:

For those of us who have played "what-if games" with data and assembled charts, Muse, by Occam Research, will at first look like another spreadsheet. It's much more, however. It brings together multi-dimensional spreadsheets, natural-language queries, good charting and graphing capabilities, and a robust way of rearranging data.

The product is not a data dipper or spreadsheet stuffer such as DataPrism or Clear Access. (See next issue for a review of Clear Access for Windows.) Muse is a language-assisted data-analysis software package. The product relies on the availability of data that is retrieved from relational or flat-file **databases** by other products. I tested Muse on a Macintosh IIx. The data, more than 1MB, came from a relational SQL **database** using Clear Access for retrieval.

#### Asking the Muse

The soul of Muse is the **natural - language query** tool. (Occam did some human-factors research and found and uses words that nontechnical people could identify.) Access to the tool is performed through the script window. A question posed to Muse uses the currently opened DataBook containing the user data and the Muse dictionary to return data. Data can be **returned** as either a **single response** to the script window or as an array into a Workbook. The language engine is sophisticated, and the Muse dictionary used by the engine is extensively populated with most common language elements, for example: time, date, and multiword elements.

The complex nature of **natural language** requires some training and tweaking. When loading data into a DataBook, you must fill in the meanings of data. Meanings are expressed in Muse as types, field labels, and other Muse-oriented description nouns (such as number, dollars, or salary). Muse's hand-holding makes tweaking more palatable. I posed some questions to Muse that resulted in NULL or incorrect answers because the Muse dictionary had not been fully informed of how I wanted to use data.

A question posed to Muse during the tutorial exemplified this: "What employee has a degree in Tennis?" A NULL answer was returned because the description of degree was not complete enough to associate Tennis with it. Using the natural-language tool to further describe and define the column header "degree" would have allowed Muse to answer the question.

One of the nice capabilities of the dictionary is converting units of international currency and measurement. Occam ships Muse with the currency conversion rates for that week; after that, you have to update the currency tables according to your own needs. The possible source or target units of conversion include such measurements as Biblical, Medieval, and Systeme Internationale (or Metric).

#### Muse Workbook

The Workbook is for retrieving, manipulating, analyzing, and loading data and is where multipart answer data is placed. Here Muse gives you a view of the data contained in the DataBook and allows you to work with that data in a spreadsheet-like fashion. The underlying data is held in a relational table where the columns represent dimensions. The data cells do not store formulas the same way a true spreadsheet does.

The Workbook has four physical dimensions: columns, rows, pages, and chapters. Pages and chapters allow the Workbook to have five to eight dimensions. These dimensions allow for 3D and animated (over time) charts. You can expand and manipulate the arrangement of the data in the Workbook, for example, by putting yearly data into the "pages" (3D) dimension. Such arranging allows you to view a year's worth of data at a time. You manipulate the data organization and viewing by selecting just one of the label cells and moving it to the new dimension. Manipulation of this kind facilitates orthogonal or multiviewed analysis of the data, Muse's strongest feature.

#### Documentation

Muse's manuals are complete and extensive. The tutorial, which Occam suggests everyone completes, is excellent and highlights the main capabilities of Muse. The Handbook breaks the product down into its components: DataBook, WorkBook, Script, and Chart, along with the menu structure. The reference manual covers the concepts and facilities of the Muse database structure in good detail. Also covered is the structure of the Muse language. To fully exploit the product, users will need to become familiar with how to expand both the Muse dictionary and Databook dictionaries. This was not an easy task.

Although the manuals talk about importing data from relational databases and include an information coupon for Clear Access, there should be more examples about the connection between the two. Clear Access enables Muse to retrieve data from several different types of SQL databases, a capability Muse cannot currently perform by itself.

#### Ready, Data Set, Analyze

Muse has features for casual users and others that require a more intense acquaintance with the product. If you need to do analysis on large multirecord data, you will enjoy Muse's robust features. There is a lot to learn and absorb, however, in terms of crafting the dictionary so you can use the natural-language system to fully exploit Muse. For a version 1.0 product, Muse is complete and well-constructed.

#### Muse 1.0

\* Occam Research Corp., 42 Pleasant St., Watertown, MA 02172;  
617-923-3545 or fax 617-926-3262.

\* Price: \$695.

\* Requires Macintosh with 5MB of memory (2MB reserved for Muse), system 6.0.5 or later, and a 10MB hard drive. Circle 353 on the reader service card.

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COMPANY NAMES: Occam Research Corp.--Products  
DESCRIPTORS: Data Analysis; Software Packages; Evaluation; Spreadsheet  
Software; DBMS; Search Software  
SIC CODES: 7372 Prepackaged software  
TRADE NAMES: Muse (Search software)--evaluation  
OPERATING PLATFORM: Apple Macintosh  
FILE SEGMENT: CD File 275

8/9/16 (Item 1 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

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02794430 Supplier Number: 69704464 (THIS IS THE FULLTEXT)

**iPhrase Technologies Announces Addition of Software Leader to Oversee Engineering Group.**

Business Wire, p0295

Jan 30, 2001

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 466

#### TEXT:

Business/Technology Editors

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Jan. 30, 2001

Allen Olsen To Spearhead Advancement of Leading Information

Access Technology As Vice President of Engineering

iPhrase Technologies, Inc., the leading provider of enterprise information access software, today announced that Allen Olsen is joining the executive team as vice president of engineering. In this role, Olsen will lead the engineering organization and oversee the further development of iPhrase's patent-pending One Step Access(TM) software platform that connects users with critical information in a single step.

"We are pleased to have someone of Allen's caliber on board to lead our product development efforts and join our executive team," said Noam Ben-Ozer, CEO and co-founder of iPhrase. "Allen's track record in building scalable, mission-critical software and managing large, talented engineering teams prepares us for our continued robust growth."

Olsen brings to iPhrase more than 18 years of technical, managerial, and executive experience in the software industry. Prior to joining iPhrase, Olsen was the co-founder and vice president of engineering at iWant.com, makers of a demand-triggered marketing system connecting buyers and sellers. Previously, Olsen was vice president of core development at The MathWorks, with responsibility for Matlab, the world's leading technical engineering software. He also served as the development manager for Improv, a multi-dimensional spreadsheet produced by Lotus and was one of a four-person development team at Nashoba Systems, which produced the leading database on the Macintosh, Filemaker Pro.

"iPhrase is a rare company that's solving a massive business problem with truly breakthrough technology, which is very exciting to me. This is one of the strongest technical teams imaginable, and I look forward to leading the continued development of the platform that is already defining the enterprise information access market," Olsen said.

#### About iPhrase

iPhrase is the leading provider of enterprise information access software, enabling companies to connect users with the most relevant information in one step. iPhrase was founded by business leaders who came together with former MIT researchers to address the growing "information access crisis" facing users, who are finding it increasingly difficult to access information efficiently and intuitively.

iPhrase utilizes best-of-breed **natural language** technology to create highly accurate and scaleable commerce, research, and support solutions, which result in dramatically improved conversion rates, user productivity, and customer service. iPhrase's patent-pending technology intelligently interprets a user's question, **queries all relevant data** sources and **presents** a specific, tailored response in a single step. Backed by Sequoia Capital, Greylock Management, and Charles River Ventures, iPhrase has offices in Cambridge, MA and San Mateo, CA. For more information, please visit [www.iphrase.com](http://www.iphrase.com) or call 617/621-7844.

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PUBLISHER NAME: Business Wire

COMPANY NAMES: \*iPhrase Technologies Inc.

PRODUCT NAMES: \*7372420 (Database Software); 7372423 (Geographic Information Systems)

INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)

SIC CODES: 7372 (Prepackaged software)

NAICS CODES: 51121 (Software Publishers)

8/9/19 (Item 4 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

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02731060 Supplier Number: 67157116 (THIS IS THE FULLTEXT)

Cisco and noHold, Inc. Engage in a Pilot Project to Create Next-Generation Interactive Knowledge Portal for Online Customer Support.

Business Wire, p0528

Nov 20, 2000

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 441

#### TEXT:

Business Editors and High Tech Writers

MILPITAS, Calif.--BUSINESS WIRE)--Nov. 20, 2000--noHold, Inc., the leader in creating interactive knowledge portals, has started a pilot project with Cisco Systems. Inc. to develop a next-generation technical support WEB tool based on noHold's unique DynamicDialog(TM) technology.

The noHold solution empowers Cisco customers to easily gather information and find solutions from several independent data sources through a single point of contact on Cisco's Web site. The noHold interface allows users to ask questions or describe problems in **natural language**, then carries on an intelligent conversation with the user until it has enough information to **present** an accurate, **relevant answer**. noHold's DynamicDialog(TM) technology uses a dynamic "**query** -reason-and-respond" process that emulates the way a technical support representative interacts



with a customer. This process includes real-time connection to various independent structured information sources, driving users quickly to the solutions or answers they are seeking.

"Cisco is a leader in customer support and services and this new feature will help it extend its leadership. Our solution has the unique capability of accessing its own knowledge platform as well as existing legacy databases and third party tools to provide the best information and the most satisfying customer experience," said Diego Ventura, founder and CEO of noHold.

About noHold, Inc.

Founded in 1999, noHold, Inc. is located in the heart of Silicon Valley. noHold develops interactive knowledge portals that present customers, partners and employees with a single point of access to corporate information sources. Users navigate and ask questions through an easy-to-use natural language interface. noHold's unique DynamicDialog(TM) technology simulates live, intelligent conversation to yield the most accurate answers, best solutions and a superior user experience. Interactive knowledge portals are used by customer service, technical support, human resources, sales and other information-rich organizations.

Our DynamicDialog(TM) technology is the only system available today that combines natural-language chat, key word search, menu-driven diagnostic tree navigation, and real-time connection to autonomous and/or external 'live' data sources. noHold's solution improves end-user experience and customer satisfaction, and reduces cost within customer service organizations. Additional information is available at [www.nohold.com](http://www.nohold.com), by sending e-mail to [info@nohold.com](mailto:info@nohold.com), or by calling (408) 936-9200. noHold is a privately held corporation.

About Cisco Systems, Inc.

Cisco (NASDAQ: CSCO) is the worldwide leader in networking for the Internet. News and information are available at [www.cisco.com](http://www.cisco.com).

noHold is a trademark of noHold, Inc. All other marks are used for the benefit of their respective holders.

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PUBLISHER NAME: Business Wire

COMPANY NAMES: \*Cisco Systems Inc.

GEOGRAPHIC NAMES: \*1USA (United States)

PRODUCT NAMES: \*3661250 (Data Communications Systems)

INDUSTRY NAMES: BUS (Business, General); BUSN (Any type of business)

SIC CODES: 3661 (Telephone and telegraph apparatus)

NAICS CODES: 33421 (Telephone Apparatus Manufacturing)

TICKER SYMBOLS: CSCO

8/9/24 (Item 9 from file: 621)

DIALOG(R)File 621:Gale Group New Prod.Annou.(R)

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01727405 Supplier Number: 53078509 (THIS IS THE FULLTEXT)

**AltaVista Unveils The Most Powerful and Useful Guide to the Internet;**

**Navigating the Internet Becomes Easier, Faster, and Family Friendly with an Array of Advanced AltaVista Technologies.**

Business Wire, p1124

Oct 13, 1998

Language: English Record Type: Fulltext

Document Type: Newswire; Trade

Word Count: 1522

TEXT:

HOUSTON--(BUSINESS WIRE)--Oct. 13, 1998--AltaVista, a division of Compaq Computer Corporation (NYSE:CPQ), today unveiled a major update to its popular AltaVista Internet guide ([www.altavista.com](http://www.altavista.com) and [www.av.com](http://www.av.com)) (1). For the first time, power and ease of use to make navigating the Internet relevant, fast, effective, and family friendly for Web users of all computing proficiency levels.

The new AltaVista features AV Full View Searching, a simple and seamless combination of the three main search techniques -- index search, directory search, and question-and-answer search -- to cover the fullest range of users' Web navigation needs. AV Full View Searching uniquely

delivers Ask AltaVista. This new capability allows Web navigators to get immediate help from an AltaVista "librarian" by asking questions in simple English and getting the single, most relevant answer.

The new AltaVista site also offers in-depth multimedia search capability with AV Photo Finder, delivering powerful navigation of more than 10 million Internet pictures. In addition, AltaVista is introducing the innovative AV Family Filter, which allows users to automatically filter out offensive material while they search the Internet. Finally, the AltaVista site now includes the industry-leading AV Ease & Relevance Architecture, a collection of five new techniques that make searching considerably easier and more precise.

"We are tremendously excited to deliver the most significant update to AltaVista since its inception. The new AltaVista site makes navigating the Internet both powerful and useful, a combination important to Internet users of all proficiency levels," said Rod Schrock, Senior Vice President and Group General Manager, Consumer Products. "This new site is clean, simple, relevant and to the point -- it makes navigating the Internet more effective than ever before. We expect it to have great consumer appeal that will ensure the rapid, continued growth of AltaVista."

#### Find it Your Way with AV Full View Searching

AltaVista is the first Internet guide to seamlessly combine all natural methods of information searching. Just like visiting a library, AltaVista users can look through a "card catalog" using the power of AltaVista's 140 million Web page index. Or, users can go right to their main topic of interest with the new AltaVista Category search, like going straight to the history aisle of a **library**. Finally, using the exciting new Ask AltaVista feature is as easy as asking for help from a **librarian**. With AV Full View Searching, users can choose whatever search method they prefer to quickly find the information they need.

#### Ask AltaVista to Get a Better Answer

Ask AltaVista takes users' plain English questions and **returns** the **single best answer** on the Internet. It uses **Natural Language Processing (NLP)** technology in combination with a human-engineered knowledge base of six million questions to best understand the user's request and **provide** the **single highest quality answer**. To do this, research editors have pre-searched the Internet to hand-pick Web sites that best answer users' most popular questions.

For example, if you type in the question: "What is the weather in San Francisco?" Ask AltaVista returns a site which best answers this question. User testing has shown that putting a few simple, targeted questions and answers at the top of the search results page helps users who may otherwise be overwhelmed by the power of the AltaVista search engine. The knowledge base and a large portion of the NLP technology was developed by Ask Jeeves, Inc.

#### Expand Your Internet with Multimedia Search

Today AltaVista introduces revolutionary visual search capabilities with AV Photo Finder, providing access to one of the largest image indexes on the Web. AV Photo Finder incorporates more than 10 million distinct images, including black & white and color photos, illustrations, and other artwork.

AV Photo Finder is as simple and easy to use as routine topic searches. Users type a request and results are immediately delivered as thumbnail sketches ranked by relevance. By clicking on the photograph or graphic of their choice, users link to the image or the image's homepage for viewing. Users can choose to search the entire Web or limit their search to premiere collections.

AV Photo Finder, developed in partnership with Virage, Inc., provides users supplementary background information on images, including title, image size, and a brief description. The feature also includes an option that lets users link to a page of images or photos visually similar to the selected image or photo.

#### Enjoy the Internet in Safety

The new AltaVista Family Filter automatically filters objectionable material, such as pornography and hate- or violence-related materials, while users search the Internet without limiting AltaVista's power and usefulness. Designed with three levels of protection, AV Family Filter first checks to see if the page belongs to an objectionable category as identified by AltaVista's automated categorization technology. AV Family

Filter then reviews information through a proprietary automated filtering process developed in partnership with SurfWatch Software, an industry leader in content filtering. AltaVista also incorporates editorial filtering, giving users the power to help identify potentially objectionable pages which they can submit to AltaVista. After research editors conduct a review, AltaVista tags the specific pages for filtering.

For further protection, AltaVista users can set AV Family Filter as a password-protected default, giving families added Internet security. In addition, AltaVista has pre-set the AV Family Filter as the default option for the AV Photo Finder as a precaution for our users. Only AltaVista provides such thorough filtering of the largest search index of the Web. AV Family Filter also is the only service to provide filtered search technology compatible with client-side filtering software.

Get Better Results with the AV Ease & Relevance Architecture

To further enhance the search experience, AltaVista has introduced five exciting new techniques, which are the foundation of its AV Ease & Relevance Architecture.

AltaVista Recommends takes the power of Ask AltaVista to the next level, connecting the user to additional Web sites relevant to the initial request. In addition to suggesting a single site that precisely answers a specific question, AltaVista Recommends offers a selection of related "AV Categories" Web pages with links to many high quality sites handpicked by editors.

AV On-Target technology selects the highest quality Web sites matching a given request and pushes them to the first index results page.

AltaVista Phrase Detection technology helps AltaVista understand plain language by recognizing millions of commonly used phrases frequently used in Internet searches. Now users no longer have to manually identify phrases to find exactly what they're looking for. For example, users who type in New York will now get results focused on the city of New York, rather than thousands of Web pages including "new" and "york." AV Phrase Dictionary includes famous people, movie titles, technical terms, and other commonly used phrases.

AltaVista Spell Check helps users who accidentally misspell a word in the search box find what they need. AV Spell Check gently prompts users - in English, French, Spanish, or Italian - to consider alternate spellings of their query when a misspelling is detected.

AltaVista Tools & Gadgets provides a single, convenient place to find exciting interactive services that are often buried and difficult to locate within large Web sites. AltaVista is working with a wide range of partners to provide easy access to the most useful and popular Web "gadgets."

Together, the new technologies in the AV Ease & Relevance Architecture achieve two key goals: -- Reasserting AltaVista's leadership in the most powerful and advanced search technologies on the Internet -- Aggressively extending AltaVista with new ease-of-use improvements important to novice users.

Getting to AltaVista is Easier Than Ever

Today, going to AltaVista to exploit its power and capabilities is easier than ever before. The new AltaVista Internet guide is available at the simplified URL [www.altavista.com](http://www.altavista.com). And getting there will be still easier in the future when a second new URL, [www.av.com](http://www.av.com), goes live in November.

About AltaVista Search

Compaq's AltaVista is the most powerful and useful guide to the Internet. A forerunner in Web search technology, AltaVista is setting new standards, from indexing the entire Internet to providing the Web's first instant language translation capabilities. With an extensive line-up of innovative content and services, AltaVista is one of the top destinations on the Web. For more information, visit AltaVista's flagship site located at <http://www.altavista.com>

Company Background

Founded in 1982, Compaq Computer Corporation is a Fortune Global 100 company. Compaq is the second largest computer company in the world and the largest global supplier of personal computers. Compaq develops and markets hardware, software, solutions and services, including industry-leading enterprise computing solutions, fault-tolerant business-critical solutions, networking and communication products, commercial desktop and portable products and consumer PCs. The company is an industry leader in

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Compaq products are sold and supported in more than 100 countries through a network of authorized Compaq marketing partners. Customer support and information about Compaq and its products are on the World Wide Web at <http://www.compaq.com> and are available by calling 1-800-OK-COMPAQ. Product information and reseller locations are available by calling 1-800-345-1518.

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**ASCS data system 'converses' in Plain English. (Agricultural Stabilization and Conservation Service)**

Taft, Darryl K.

Government Computer News, v9, n5, p34(2)

March 5, 1990

ISSN: 0738-4300 LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT

WORD COUNT: 715 LINE COUNT: 00058

**ABSTRACT:** The Agriculture Department's ASCS is developing Plain English, a prototype application that delivers information for ASCS program evaluators and planners. The prototype is able to understand queries and respond in plain conversational English. It is designed for managers who have no time to learn computer query languages. Plain English, which runs on a DEC VAX 8800 under VMS with DEC's Rdb data base management system, contains data from ASCS county offices nationwide. Aside from language understanding, it is able to do integrated graphics, interactive learning, table manipulation and data analysis.

**TEXT:**

ASCS Data System 'Converses' in Plain English

Plain talk is a valued commodity at the Agriculture Department.

The Agricultural Stabilization and Conservation Service is developing a data retrieval system for executives that not only understands English queries but also responds in plain conversational English.

The prototype is for managers who have little need or time to learn computer query languages, said Leonard Covello, branch chief of the Management Analysis Branch in ASCS' Information Resources Management Division.

The prototype, known as the Plain English application, will deliver information for ASCS program evaluation and planning. The system's abilities include language understanding, integrated graphics, interactive learning, table manipulation and data analysis.

The prototype runs on a Digital Equipment Corp. VAX 8800 at ASCS headquarters in Washington. It has data from ASCS county offices across the country. The system runs under VMS with DEC's Rdb database management system.

Although ASCS managers will use the system first, it also may see action at the USDA secretary's level, Covello said.

"We believe it's going to be a very successful application," he said. "It's targeted at upper management, but I hope it becomes more widely available."

ASCS' mission is to stabilize farm commodity prices and conserve

land. The agency supports prices sometimes by buying crops at targeted prices and sometimes by paying for lower production by farmers to hold down supply.

Covello's staff has been working on the system for nearly a year and now is testing it, he said. Work on the prototype will be completed by May, he said. Covello's staff developed the system using Natural Language Inc.'s Natural Language system. ASCS spent about \$50,000 on the Berkeley, Calif., company's software.

The prototype system contains about 25 tables, each with between 1,000 and 300,000 records. Once deployed the system will have an extra 25 to 50 tables, each with 100,000 to 300,000 records, Covello said.

Last year, Covello's staff began contemplating an executive information system for the agency's top executives. However, much of the information they required was not in machine-readable form or existed only in batch mode, Covello said.

ASCS has nearly 3,000 county offices, each with heaps of farm and crop data.

"With so many offices you can imagine the amount of information we have to deal with," Covello said. "We had a data administration issue that had to be solved: how we could access all that data and use it for administrative purposes."

The group developed a menu-driven system -- a series of screens written in the Focus fourth-generation language from Information Builders Inc., New York -- to manage and access the data. Users will be able to access the "Plain English" system by selecting it on the ASCS executive information system menu.

"But we knew we'd run into queries that wouldn't be suitable for that system," Covello said. "For instance, a congressman might call us to ask about the status of the XYZ program in his county or state. That information is not easily accessible without a series of complex queries."

Another use might be to generate quick responses to Equal Employment Opportunity Commission queries, he said.

Covello's staff did a technology assessment and decided a natural language system could solve their problems, Covello said.

#### Echo Displayed

The Natural Language product delivers the best answer it can find from the information in the user's database, company officials said. When a user enters an English question, the natural language processor uses its knowledge base and English grammar rules to reason about the question. It produces an internal representation of what the question actually means and generates an English paraphrase or "echo" for the user to see.

Following the echo, Natural Language generates a formal Structured Query Language query that gets the answer from the database. The product understands different versions of the same question. It also includes interactive learning features and lets users create reports, manipulate columns and save output and SQL in ASCII files.

The prototype's database has information on the ASCS county offices and their employees. It also contains information on expenses, payments, producers, farms and crops, Covello said.

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Assisted Search for Knowledge (ASK): A navigational tool set to global

## change data and information

Rand, Roberta Y

Information Technology & Libraries v14n2 PP: 87-91 Jun 1995 CODEN:

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**ABSTRACT:** Librarians and information management professionals have recognized the need to assist researchers in complex multidisciplinary research areas and have developed and applied tools to assist in the storage and retrieval of information. The federal agencies participating in the US Global Change Research Program are organizing the Global Change Data and Information System (GCDIS). Assisted Search for Knowledge (ASK) is one project that is underway to provide access to GCDIS. ASK builds on an earlier project, the Thesaurus Project, which was coordinated by the US Department of Agriculture's National Agricultural Library. The fundamental concept behind the ASK pilot project is to develop a prototype system that links databases diverse in format and content, while enabling users with different skills, needs, and access methods to obtain relevant information from these databases.

**TEXT:** Traditionally, librarians and information management professionals have recognized the need to assist researchers in complex multidisciplinary research areas, and have developed and applied tools to assist in the storage and retrieval of information. In response to the vast amounts of research data and information now being collected, it is readily acknowledged that additional retrieval tools are needed. These additional tools can be viewed as "meta" tools, enabling and extending the full use of existing tools. This article describes a prototype online search system that will provide Internet and dial-up access to an array of databases related to environmental and demographic change. This "digital library" will link together diverse databases in different locations and will consist of unstructured full-text information, structured alphanumeric information, and satellite imagery and map information, and will deliver data to researchers in a form and context people can understand.

The United States Global Change Research Program (USGCRP) was established to observe, understand, and predict global change and to make the results of its research examining global change available for use in policy matters. The activities of the USGCRP are coordinated by the Committee on the Environment and Natural Resources Research (CENRR) (previously CEES, or the Global Change Committee on Earth and Environmental Sciences). Because research data and information are of fundamental importance in understanding and predicting global change, the 1992 "Global Change Data and Information Management Program Plan" was written and published to clearly state the collective commitment of the agencies participating in the USGCRP. In the program plan, participating agencies commit to work with each other, with academia, and with the international community to make it as easy as possible for researchers and others to access and use global change research data and information. It is toward this end that the federal agencies participating in the USGCRP are organizing the Global Change Data and Information System (GCDIS), which takes full advantage of the mission's resources and of the responsibilities of each agency, and links the services of the participating research data and information resources to each other and to users. These agencies realize it is critical to the success of the global change research agenda to have precise and accurate access to data and information.

The planning and organization of the GCDIS is being fully coordinated by a subcommittee of the CENRR, called the Interagency Working Group on Data Management for Global Change (IWG). The "Global Change Data and Information System Implementation Plan" builds on the broader program plan to define the construction of the GCDIS. The implementation plan states that the participating agencies will identify the vast array of data and information to be included, basing the criteria on the highest priority areas of interest, and will design and implement data and information services that are adequate to support the full breadth of the USGCRP.

To start this process, the agencies have initiated several pilot projects that are intended to broaden the scope of GCDIS. The Access Subgroup, one of the three subgroups of the IWG (the two others being the Library and Information Subgroup and the Contents Subgroup(1)), will coordinate the IWG activities necessary to develop the IWG access infrastructure. These activities include: providing mechanisms for the agencies to share access-related experiences and expertise, the development and application of standards and technology, demonstrations and pilot projects, mechanisms for feedback from the broad user community, and assessing the performance of the GCDIS access system. Several projects are underway to provide access to GCDIS: a gopher, a World Wide Web Browser, and the Assisted Search for Knowledge (ASK).

\* Developing a Prototype System: ASK

ASK builds on an earlier project, the "Thesaurus Project," (2) which was coordinated by the U.S. Department of Agriculture's National Agricultural Library (NAL). The objective of the "Thesaurus Project" was to establish a "proof of concept"--to show that traditional methods for search and retrieval currently employed could be greatly improved through available new technology. The intention was to:

expand existing controlled vocabulary (keyword) capabilities at all levels by using a computerized, interactive, integrated knowledge base, that is, a semantic network combined with natural language understanding. This would be achieved by linking together existing distributed vocabularies and dictionaries, using keyword mapping, and by adopting other mechanisms to provide concept-based searching. The result would be enhanced access to multiple, distributed metadata directories and data collections, without ownership, using natural language queries. The success of this approach will be determined, in part, by the rate of development and the direction of emerging semantic networking technology. The process would be accelerated by procuring currently available off-the-shelf, client/server software which adheres to common standards for this technology.

ConQuest Software, Inc., was the basis of the "Thesaurus Project." ConQuest has an existing commercially available text and image retrieval system that uses natural language processing techniques, word meaning processing, and concept-based information retrieval built from many electronically available dictionaries and thesauri.

The fundamental concept behind the ASK pilot project is to develop a prototype system that links **databases** diverse in format and content, while enabling users with different skills, needs, and access methods to obtain relevant information from these **databases**. This linkage will be done by using a **natural language** inquiry and a common user interface. The ASK project plan calls for the development of four prototypes to be delivered over the next twelve months. The first of these prototypes was delivered on January 10, 1995.

Prototype #1

A software testbed, this prototype demonstrates the key principles that are the essential technical foundation for continued successful development. It includes the ability to enter a command line **query** via the client software, which searches multiple **databases** over the Internet and **provides** a **single merged response**. The success of prototype #1 **delivery** is the baseline for providing increasing support to a broad cross-section of users who are concerned with access to and the analysis of global change data.

In addition, a User Concept of Operations (ConOps) is developing and will be reviewed at each stage of development by the ASK Users Working Group. This group represents experts on the identified user categories (researchers, policymakers, K-14, and the general public) and provides a mechanism to assess user needs for enhanced system development.

Prototype #2

Scheduled for availability on April 10, 1995, prototype #2 will: add a generic graphical user interface (GUI), be Z39.50 compliant, contain one or more additional knowledge bases (the National Institute of Health's Unified Medical Language System, the Defense Technical Information Center, and the NASA Thesaurus), and will be publicly available in Washington, D.C., on the Mall and in several Smithsonian locations, for Earth Day.

Several of the databases expected to be accessed by the ASK prototype system include significant geographic content. Therefore, a versatile capability for handling various types of geographic data, including digital imagery, is an important aspect of the program. Toward this end, E-Systems will provide OASIS (Open Architecture for Scientific Information Systems)--a software product that implements system-level building blocks based on common industry standards and commercially available platforms--for configuring systems to provide data management and graphic processing capabilities for spatial data. The modular software architecture and adherence to an open-systems concept fits the ASK concept and will become an integral component of ASK in prototype #2.

#### Prototype #3

Scheduled for availability in July 1995, prototype #3 will add a commercially-off-the-shelf (COTS) geographic information systems (GIS) capability, additional GUIs for multiple user classes, a consistent data presentation model, or non-native (non-ConQuest) search engine to demonstrate the capability to link to and effectively utilize the functionality of existing search engines of participating agencies.

#### Prototype #4

Finally, scheduled for availability in October 1995, prototype #4 will provide the ability to manage metadata and source selection using a knowledge base for simultaneous information access across multiple databases (including non-native search engines), and will include retrospective searching, real-time profiling, and on-disk (CD-ROM) product searching.

ASK is a team effort. ConQuest Software, Inc., which won the contract and is the lead company, is providing full-text search and retrieval engines and integration tools linking the databases together. ConQuest has teamed with E-Systems, which is acting as the project systems integrator and providing spatial data processing assistance. The other members of the team are: Infrastructures for Information, Inc., which is delivering capabilities for filtering and viewing diverse documents; WAIS, Inc., which is providing Internet communications protocols; and the University of California at Santa Barbara, the institution that is home to Project Alexandria.

Many of the ASK documents are available via FTP and are searchable using ConQuest software. It is also possible to access the prototypes over the Internet (see below). (Figure below omitted)

For more information about the GCDIS-ASK project, send an e-mail message to the ASK listserv:ASK(at)circles.org. To subscribe to the ASK listserv, send an e-mail message to: majordomo(at)gaia.circles.org; leave the subject line blank, and type in the body of the record: "subscribe ASK [your name]."

#### \* Smart and Expert Mode--Sample Procedure for GC-ASK Prototype #1

On January 10, 1995, prototype #1, the first of four GC-ASK prototypes, was successfully delivered. It is a software testbed that demonstrates key principles that form the essential technical underpinnings for continued development. It includes the ability to enter a single command-line query via the client software, which then searches multiple databases over the Internet and provides a single, merged relevance-ranked response.

The next major milestone, prototype #2, is scheduled for delivery on April 10, 1995. It will add a GUI, Z39.50 protocol compliance, one additional knowledge base, and additional databases. The success of prototype #1 has



established a solid base for information support to a broad cross-section of users concerned with access to and analysis of global change data.

As part of the prototype #1 delivery, a sample procedure (or "script") is provided, which illustrates the fundamental process for searching across multiple remote libraries and merging the results. The document you are now reading addresses the use of both Smart and Expert modes. The following sample procedure will illustrate a series of simple steps that allow anyone to access the GC-ASK prototype #1 and use the Smart and Expert modes.

- \* In Smart mode, the meanings of a word are automatically included in the search.

- \* In Expert mode, one or more specific definitions of each word in the query can be selected so that only the intended meanings are used for the search.

There are two textual databases provided by multiple government agencies and hosted on government-furnished equipment. The hosts are a SUN UNIX system at NOAA and a Silicon Graphics UNIX system at NASA. The client is resident on the SUN UNIX system at NOAA.

Please note that the term "Enter" means to type the specified text and press the RETURN key. The text to be typed is enclosed in double quotes. All text and commands are lower-case.

Run the Client Program-Log On to GC-ASK

Telnet to "esdim2.esdim.noaa.gov".

At the login prompt, enter "conquest".

At the password prompt, enter "conquest11" (that is, conquest one-one).

You will briefly see some status information. This is part of the login procedure and has nothing to do with the prototype.

You will see some licensing information. Press RETURN to continue.

You will see a list of libraries (i.e., databases) that you can select. Number 1 (noaa\_lib) is the library at NOAA, number 2 (nasa\_lib) is the library at NASA.

Enter "1" to select the library at NOAA. An asterisk appears to indicate your selection.

Enter "2" to select the library at NASA. An asterisk appears to indicate your selection.

Enter "q" to quit.

After a few seconds you will see the "SMART>" prompt. This means that the system is ready to accept a query in SMART mode, which will automatically expand your query to include words that have similar meanings.

Query in Smart Mode  
Enter "trace metal contamination".

After a few seconds, you will see a numbered list of documents returned by the server. The numbers in parentheses are document ranks, which indicate the degree to which the document is likely to be related to your query. Notice document 2, "Radionuclides, metals, and organic compounds ...," which has a rank of 62.

Enter "2" to view the document. You can use "u" for up and "d" for down to move around in the document, or just press RETURN for down.

You can also enter "?" for a more complete list of commands.

Note that the words "trace" and "metal" and "contamination" have numbers under them. These are the "hit words," or "hits," which matched your query. The numbers indicate the relative strength of the hit, where higher numbers (up to 9) are stronger hits.

Note that the word "pollution" is a hit because it is an expansion of "contamination." The word "follow" is also a hit because it is an expansion of "trace." This is not what we meant by "trace," so we will eliminate that meaning in order to improve the ranking of the documents as well as the precision of the query.

Change the Query Mode

Enter "m" to display the other options menu.

Enter "4" to set the query type.

Enter "3" to set the query type to Expert.

Enter "1" to return to query program.

You will see the "EXPERT>" prompt.

Query in Expert Mode

Enter "trace metal contamination". A word selection menu is displayed.

Enter "1". All available definitions and parts of speech for "trace" are displayed. Each definition with an asterisk will be used during the search.

Enter "2-13". Meanings 2 through 13 no longer display an asterisk and will not be included during the search. All occurrences of "trace" will be found, and meaning 1 will be the only meaning used to find words that are related to "trace".

Enter "q" to return to the word selection menu.

Enter "2" to select a definition of "metal".

Enter "2" to deselect definition 2.

Enter "q" to return to the word selection menu.

Enter "3" to select a definition of "contamination".

Enter "q" to return to the word selection menu. All meanings are still selected.

Enter "q" to execute the search. After a few seconds, you will see the numbered list of documents returned by the server. Notice that the documents have been re-ranked and that our "radionuclides" document is no longer #2. Its rank has been lowered to 60 and its position in the list is now #3.

Enter "3" to view the document. Note that the words "trace", "metal", "contamination", and "pollution" are still hits. The word "follow", however, is no longer a hit.

Enter the letter "I" to return to the document list.

This was an intentionally simple example of using Expert mode in a sample database to select specific meanings, adjust rankings, and improve query precision. It shows that Smart mode generates excellent results quickly with a minimum of effort, while Expert mode allows the query to be controlled and refined. In large-scale applications, the effect can be quite dramatic.

\* Further Refinements

This sample query used an expansion level of 4, which is roughly equivalent to synonyms. The numbers 1 through 9 correspond approximately to semantic relationships, such as synonyms or antonyms, with each increasing number adding more related terms to the query. Thus, 1 includes simple variations of the search word itself, while 9 may include many very distantly related words. Should you wish to experiment with the expansion level, you will find it in the other options menu, "m", option #3. Remember that entering "?" shows you the commands you can use while exploring. When you are finished, go to the logout instructions below.

#### Logout

Enter "q". The system asks if you want to exit the program.

Enter "Y".

Should you have any questions or comments about this document or the GC-ASK project, please contact Cheri Pender at 1-800-787-1715 or via e-mail at [cpender\(at\)cq.com](mailto:cpender(at)cq.com).

#### Notes

1. For the purposes of this paper, emphasis has been placed on the Access Subgroup. For more information about the Library Information Subgroup or the Contents Subgroup, contact the Global Change Research and Information Office (GCRIO) at 1747 Pennsylvania Ave, NW, Suite 200, Washington, D.C., 20006; (202) 775-6600; fax (202) 775-6622; e-mail [gbarton\(at\)gcric.org](mailto:gbarton(at)gcric.org).

2. For more information about this project, contact Roberta Y. Rand, USDA National Agricultural Library, USDA Global Change Data and Information Management, Coordinator, Information Systems Division, 10301 Baltimore Blvd., Beltsville, Maryland, 20705; (301) 504-6813; e-mail [rrand\(at\)usda.gov](mailto:rrand(at)usda.gov).

#### References

All documents are available from the Global Change Research and Information Office (GCRIO), 1747 Pennsylvania Ave, NW, Suite 200, Washington, D.C., 20006; (202) 775-6600; fax (202) 775-6622; e-mail: [gbarton\(at\)gcric.org](mailto:gbarton(at)gcric.org).

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 File 438: Library Lit. & Info. Science 1984-2004/Jul  
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Set	Items	Description
S1	63368	NATURAL() LANGUAGE OR FREE() FORM
S2	143607	(DIRECT OR ONE OR SINGLE OR SOLITARY OR LONE OR BEST OR HIGHEST) (2W) (ANSWER OR REPLY OR RESPONSE OR RECORD OR ENTRY OR DATA OR FILE OR DOCUMENT OR ARTICLE OR PAGE OR WEBPAGE OR SITE OR WEBSITE OR OBJECT)
S3	52085	(MOST OR RELEVANT OR APPROPRIATE) (2W) (ANSWER OR REPLY OR RESPONSE OR RECORD OR ITEM OR ENTRY OR DATA OR FILE OR DOCUMENT OR ARTICLE OR PAGE OR WEBPAGE OR SITE OR WEBSITE OR OBJECT)
S4	25778	S2:S3(7N) (RETRIEV? OR OBTAIN??? OR PROVID? OR PROVISION OR RETURN??? OR FORWARD??? OR SEND??? OR SENT OR TRANSFER??? OR DELIVER??? OR MAIL??? OR EMAIL??? OR DISPLAY??? OR PRESENT??? OR SHOW???)
S5	104	S1 AND S4
S6	65	S5 AND (DATABASE? ? OR DATA() (BASE? ? OR WAREHOUSE? ?) OR REPOSITOR??? OR LIBRAR??? OR SEARCH() ENGINE? ? OR QUER???)
S7	47	RD (unique items)
S8	34	S7 NOT PY=2002:2004

8/5/3 (Item 3 from file: 8)  
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04306130 E.I. No: EIP95122951625

**Title: Evaluation the uncertainty of textual data with logic and statistics**

Author: Larouk, Omar; Batache, Mourade

Corporate Source: Ecole Nationale Supérieure des Sciences de l'Information et des Bibliothèques (CERSI), Villeurbanne, Fr

Conference Title: Proceedings of the 3rd International Symposium on Uncertainty Modeling and Analysis and Annual Conference of the North American Fuzzy Information Processing Society, (ISUMA - NAFIPS'95)

Conference Location: College Park, MD, USA Conference Date: 19950917-19950920

Sponsor: IEEE

E.I. Conference No.: 44044

Source: Proc 3 Int Symp Uncert Model Anal Annu Conf North Amer Fuzzy Inf Process Soc 1995. IEEE, 95CS8082. p 739-744

Publication Year: 1995

Language: English

Document Type: CA; (Conference Article) Treatment: A; (Applications)

Journal Announcement: 9602W2

Abstract: In this article, we describe the problem of the conjunctions of coordinations in the French language. This paper treats of the textual data. **Most document retrieval** that user **queries** be specified in the form of boolean expressions. The are the uncertainty in combining **queries**. They have flaws. Many ambiguities in texts are due to the use of classical methods of computing. The idea of the work is to extract the 'reach' of the coordination (conjunctions) in information system and looking for the importance of punctuation with statistical. Textual algorithm is contributed to detection and correction the signs of punctuation. (Author abstract) 9 Refs.

Descriptors: **Natural language** processing systems; Computational linguistics; Formal logic; Statistics; Algorithms; Information retrieval systems; Knowledge representation; Expert systems; **Query** languages; Automation

Identifiers: French language; Uncertainty textual data; Connectors; Documentary automation; Documentary information systems; Textual algorithm

Classification Codes:

723.2 (Data Processing); 721.1 (Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory); 922.2 (Mathematical Statistics); 723.1 (Computer Programming); 903.3 (Information Retrieval & Use); 723.4 (Artificial Intelligence)  
723 (Computer Software); 721 (Computer Circuits & Logic Elements); 922 (Statistical Methods); 903 (Information Science)  
72 (COMPUTERS & DATA PROCESSING); 92 (ENGINEERING MATHEMATICS); 90 (GENERAL ENGINEERING)

8/5/7 (Item 7 from file: 8)  
DIALOG(R)File 8:EI Compendex(R)  
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01899416 E.I. Monthly No: EIM8510-062304

**Title: CATEGORIZING NATURAL - LANGUAGE QUERIES FOR INTELLIGENT RESPONSES.**

Author: Gooden, Kurt

Corporate Source: GM Research Lab, Warren, MI, USA

Conference Title: AFIPS Conference Proceedings, 1985 National Computer Conference.

Conference Location: Chicago, IL, USA Conference Date: 19850715

Sponsor: AFIPS Inc, Reston, VA, USA; ACM, New York, NY, USA; Data Processing Management Assoc, Park Ridge, IL, USA; IEEE Computer Soc, Los Alamitos, CA, USA; Soc for Computer Simulation, La Jolla, CA, USA

E.I. Conference No.: 06896

Source: AFIPS Conference Proceedings v 54. Publ by AFIPS Press, Reston, VA, USA p 67-73

Publication Year: 1985

CODEN: AFPGBT ISSN: 0095-6880 ISBN: 0-88283-046-5

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8510

Abstract: A new classification scheme of **natural - language queries** based on a pragmatic notion called satisfiability is **presented**. A **query** is satisfiable if a **direct response** to it can be **provided** by the system. The author claims that **natural - language queries** fall along a discrete satisfiable-unsatisfiable scale and that the production of informative English responses can be successfully organized around the satisfiability of **queries**. A system's semantic interpretation of a **query** can be shown to a user by a paraphrase in the response itself, and false user assumptions are correctable without disturbing the natural flow of the dialogue. These ideas have been implemented in a **database** dialogue system called DATALOG. Examples are presented using actual exchanges in the DATALOG system. (Edited author abstract.) 6 refs.

Descriptors: SYSTEMS SCIENCE AND CYBERNETICS--\*Artificial Intelligence; SPEECH--Recognition; **DATABASE SYSTEMS**

Identifiers: **NATURAL - LANGUAGE QUERIES ; SATISFIABILITY OF QUERIES ; DATALOG SYSTEM**

Classification Codes:

731 (Automatic Control Principles); 751 (Acoustics)

73 (CONTROL ENGINEERING); 75 (ACOUSTICAL TECHNOLOGY)

8/5/8 (Item 8 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

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01848729 E.I. Monthly No: EIM8501-003003

Title: **FROM RESEARCH TO APPLICATION: THE CITE NATURAL LANGUAGE INFORMATION RETRIEVAL SYSTEM.**

Author: Doszkocs, Tamas E.

Corporate Source: Natl Library of Medicine, Silver Spring, MD, USA

Conference Title: Research and Development in Information Retrieval, Proceedings.

Conference Location: Berlin, West Ger Conference Date: 19820518

Sponsor: Gesellschaft fuer Informatik; ACM, New York, NY, USA; British Computer Soc, London, Engl

E.I. Conference No.: 05676

Source: Lecture Notes in Computer Science 146. Publ by Springer-Verlag, Berlin, West Ger and New York, NY, USA p 251-262

Publication Year: 1983

CODEN: LNCSD9 ISSN: 0302-9743 ISBN: 3-540-11978-7

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8501

Abstract: The design and implementation is described of a **natural language** search interface to MEDLINE, the National **Library** of Medicine's largest and **most** heavily used **data base**. The CITE (Current Information **Transfer** in English) prototype system is a large-scale, weighted logic information retrieval system with **natural language query** input, ranked search output, dynamic user feedback and automatic associative vocabulary mapping capabilities. 22 refs.

Descriptors: INFORMATION RETRIEVAL SYSTEMS; **DATABASE SYSTEMS**

Identifiers: NATURAL LANGUAGES; FILE STRUCTURES; BOOLEAN LOGIC OPERATORS; CURRENT INFORMATION TRANSFER IN ENGLISH (CITE); MEDLINE ENVIRONMENT

Classification Codes:

901 (Engineering Profession); 723 (Computer Software)

90 (GENERAL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING)

8/5/11 (Item 3 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online

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951598 ORDER NO: AAD87-09879

**A SCRIPT-BASED KNOWLEDGE REPRESENTATION FOR INTELLIGENT OFFICE INFORMATION SYSTEMS (AUDITING)**

Author: ZACARIAS, PRUDENCE TANGCO  
Degree: PH.D.  
Year: 1986  
Corporate Source/Institution: PURDUE UNIVERSITY (0183)  
Source: VOLUME 48/01-A OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 174. 148 PAGES  
Descriptors: BUSINESS ADMINISTRATION, MANAGEMENT  
Descriptor Codes: 0454

Intelligent Office Information Systems integrate problem solving, **natural language** processing, knowledge representation, information management and other capabilities that are necessary for supporting the various functions of an organization. This research focuses on the problem solving aspect, and attempts to model organizational problem solving behavior, in planning and acting, using script-based knowledge representation techniques. The philosophy of object-oriented programming languages is useful in describing the behavior of the different parts of the organization that coordinate and cooperate in a problem solving situation.

Problem solving in office information systems call for facilities for **natural language** processing for testing the effectivity of the proposed model. **Natural language** processing is a problem solving activity and theories for representing knowledge in NLP provide the basis for developing a unified theory of representing and using knowledge that is appropriate for intelligent OISs for audit support. The components of the proposed OIS for audit problem solving are based on Discourse Representation Theory, Conceptual Graph Theory, and Scripts. **Queries** involving **direct data retrieval**, postcondition and precondition analysis, and deduction are processed in the system.

8/5/12 (Item 4 from file: 35)

DIALOG(R)File 35:Dissertation Abs Online  
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747016 ORDER NO: AAD81-11264

**NATURAL LANGUAGE ACCESS TO CLINICAL DATA BASES**  
Author: EPSTEIN, MARTIN NATHANIEL  
Degree: PH.D.  
Year: 1980  
Corporate Source/Institution: UNIVERSITY OF CALIFORNIA, SAN FRANCISCO (0034)  
Source: VOLUME 41/12-B OF DISSERTATION ABSTRACTS INTERNATIONAL.  
PAGE 4579. 275 PAGES  
Descriptors: COMPUTER SCIENCE  
Descriptor Codes: 0984

This research describes a **natural language** question answering system, MEDINQUIRY, which allows convenient access by a medical specialist to a clinical **data base** on patients with malignant melanoma. Such a facility can be used in a "consultant" capacity to directly provide a problem solver with efficient and timely decision support for research studies and patient management. The physician can input requests in English that retrieve specified data for particular patients or for groups of patients satisfying certain characteristics, that specify simple calculations to be performed, and that allow browsing through the **data base**. MEDINQUIRY can assist an expert in developing hypotheses about relationships that hold among variables, and in relating information in the **data base** to prognosis and outcome.

The approach followed involves compiling an application language containing both domain specific knowledge about melanoma, and general knowledge about language supporting medical inquiry. A prototype system MEDINQUIRY, was designed and implemented employing the application language to analyze and process English language requests against the clinical **data base**.

MEDINQUIRY accepts a wide range of English language requests. For each request analyzed, it generates a formal **query** request that is passed to the **data base**, and **provides a relevant response** to the submitted inquiry. The system supports dialogue interactions; the user can follow a line of inquiry to test a particular hypothesis by entering a sequence of requests. Phrases rather than complete sentences can be used. The interpretation of the phrase is carried out in the context of prior requests. It is possible to define new constructs at the phrase level, and a limited capability exists, using a sequence of stored requests, to respond to meta-questions. It is also possible to process certain classes of time oriented requests and requests that involve negation.

Several issues involved in the design and implementation of the system are discussed. A set of criteria are suggested by which MEDINQUIRY could be evaluated. Based on these criteria, some preliminary results are given on the performance of the prototype system.

This research is also concerned with gaining an understanding of the medical inquiry process, and identifying effective inquiry strategies. A model is proposed which describes how information about malignant melanoma, and medical inquiry processes might be organized to compose requests. The model attempts to represent the processes of hypothesis formation and testing, by using a process and knowledge representation model to provide a framework that can be used in subsequent work on MEDINQUIRY in particular, and medical inquiry in general.

8/5/13 (Item 1 from file: 202)

DIALOG(R)File 202:Info. Sci. & Tech. Abs.  
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3602187

**An automatic reference service system at Kyoto University Library .**

Author(s): Kurohashi, Sadao (kuro@kc.t.u-tokyo.ac.jp); Higasa, Wataru  
Corporate Source: University of Tokyo, Japan 113-0033 ; University of

Tokyo, Japan 113-0033

Joho Kanri (Journal of Information Processing and Management) vol. 44  
, no. 3, pages 184-189

Publication Date: June 2001

ISSN: 0021-7298

Language: Japanese

Document Type: Journal Article

Record Type: Abstract

Journal Announcement: 3605

Describes the architecture of an automated reference service system developed for Kyoto University **Library** . The system employs two knowledgebases: the NDLC **database** for handling major questions at **libraries** such as "I am looking for books on...", and the general knowledgebase written in **natural language** for handling other questions. Another characteristic of the system is to be able to conduct a conversation, not just **return a one-time response** as in existing information **retrieval** systems.

Descriptors: Knowledge-Based Systems; **Library** Services; Reference Services; **Library** Automation

Classification Codes and Description: 7.2 (Automation); 7.7 (User Services, Assistance, and Orientation)

Main Heading: **Libraries** and Information Services; **Libraries** and Information Services

8/5/15 (Item 3 from file: 202)

DIALOG(R)File 202:Info. Sci. & Tech. Abs.  
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0701974

**A questioning-answering program for simple kernel sentences (que2).**

Book Title: Report Nsf-gj-509-x; Tr-nl-5. 1971 March. 29 P. Edrs: Ed-053



585; Hc \$3.29, Mf \$0.65. Sponsored By National Science Foundation, Washington.

Author(s): Alexander, Bill

Corporate Source: University Of Texas, Austin.

Publication Date: 1971

Language: English

Document Type: Book Chapter

Record Type: Abstract

Journal Announcement: 0700

Que2 is a recently devised, **natural language**, questioning-answering program written in lisp1-5. It deals in simple kernel sentences and employs the theory that the semantic content of a sentence is the set of relationships between conceptual objects (represented by the program which the sentence and its structure imply. The **data base** of the program is an arbitrary list of simple kernel sentences. The lexicon is a list of pairs; the first element is the word itself, and the second element is its definition the first element a relation, and the second, a list of all things which are in the given relation to the word being defined. The structure of the question is also a simple kernel sentence. Through a hierarchical set of functions, the program is capable of taking a kernel-sentence question and, based on its knowledge, **providing a one-word answer**. (true, false, or don't know) accompanied by a copy of the internal semantic structure of the sentence, if any, from which the answer was deduced. The program's capabilities are not infinite, but further details could easily be added. Tables showing the **data base**, function truth tables, flow charts, and questions and answers are included along with a list of references.

-----Classification Codes and Description: 5.11 (Searching and Retrieval)

-----Main Heading: Information Processing and Control-----

8/5/20 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

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4956359 INSPEC Abstract Number: C9507-7140-033

**Title: Natural language processing of asthma discharge summaries for the monitoring of patient care**

Author(s): Sager, N.; Lyman, M.; Tick, L.J.; Ngo Thanh Nhan; Bucknall, C.E.

Author Affiliation: Courant Inst. of Math. Sci., New York Univ., NY, USA  
p.265-8

Editor(s): Safran, C.

Publisher: McGraw-Hill, New York, NY, USA

Publication Date: 1994 Country of Publication: USA xxviii+984 pp.

ISBN: 0 07 001502 3

Conference Title: Proceedings of Seventeenth Annual Symposium on Computer Applications in Medical Care

Conference Date: 30 Oct.-3 Nov. 1993 Conference Location: Washington, DC, USA

Availability: American Medical Informatics Association, 4915 St Elmo Avenue, Suite 302, Bethesda, MD 20814, USA

Language: English Document Type: Conference Paper (PA)

Treatment: Applications (A)

Abstract: A technique for monitoring healthcare via the processing of routinely collected narrative documentation is presented. A checklist of important details of asthma management in use in the Glasgow Royal Infirmary (GRI) was translated into SQL **queries** and applied to a **database** of 59 GRI discharge summaries analyzed by the New York University Linguistic String Project medical language processor. Tables of retrieved information obtained for each **query** were compared with the text of the original documents by physician reviewers. Categories (with **one document** as a unit) were: (1) information **present**, **retrieved** correctly; (2) information not present; (3) information present, retrieved with minor or major error; and (4) information present, retrieved with minor or major omissions. Category 2 (physician "documentation score")

could be used to prioritize the manual review and guide feedback to physicians to improve documentation. The semantic structuring and relative completeness of retrieved data suggest their potential use as input to further quality assurance procedures. (13 Refs)

Subfile: C

Descriptors: health care; medical administrative data processing; natural languages; patient care; patient monitoring; **query** processing; relevance feedback

Identifiers: **natural language** processing; asthma discharge summaries; patient care; healthcare monitoring; routinely collected narrative documentation; checklist; Glasgow Royal Infirmary; SQL **queries**; New York University Linguistic String Project; medical language processor; retrieved information tables; physician reviewers; information presence; information retrieval; error; omissions; physician documentation score; manual review prioritization; feedback; semantic structuring; relative completeness; quality assurance

Class Codes: C7140 (Medical administration); C6180N (Natural language processing); C7250R (Information retrieval techniques)

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8/5/21 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

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02126541 INSPEC Abstract Number: C83040051

**Title: Automatic query formulations in information retrieval**

Author(s): Salton, G.; Buckley, C.; Fox, E.A.

Author Affiliation: Dept. of Computer Sci., Cornell Univ., Ithaca, NY,

USA

Journal: Journal of the American Society for Information Science  
vol.34, no.4 p.262-80

Publication Date: July 1983 Country of Publication: USA

CODEN: AISJB6 ISSN: 0002-8231

U.S. Copyright Clearance Center Code: 0002-8231/83/040262-19\$04.60

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Modern information **retrieval** systems are designed to supply **relevant** information in **response** to requests received from the user population. In most retrieval environments the search requests consist of keywords, or index terms, interrelated by appropriate Boolean operators. Since it is difficult for untrained users to generate effective Boolean search requests, trained search intermediaries are normally used to translate original statements of user need into useful Boolean search formulations. Methods are introduced in this study which reduce the role of the search intermediaries by making it possible to generate Boolean search formulations completely automatically from **natural language** statements provided by the system patrons. Frequency considerations are used automatically to generate appropriate term combinations as well as Boolean connectives relating the terms. Methods are covered to produce automatic **query** formulations both in a standard Boolean logic system, as well as in an extended Boolean system in which the strict interpretation of the connectives is relaxed. Experimental results are supplied to evaluate the effectiveness of the automatic **query** formulation process, and methods are described for applying the automatic **query** formulation process in practice. (15 Refs)

Subfile: C

Descriptors: information retrieval systems

Identifiers: information retrieval; information retrieval systems; search requests; keywords; index terms; Boolean operators; search intermediaries; **natural language** statements; automatic **query** formulation

Class Codes: C7250C (Bibliographic systems)

8/5/22 (Item 1 from file: 233)

DIALOG(R)File 233:Internet & Personal Comp. Abs.

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00133771 86IW12-254

**Ashton-Tate enters middle-ground database market with Rapidfile**

Miller, Michael J

InfoWorld , Dec 15 1986 , v8 n50 p57, 1 Pages

ISSN: 0199-6649

Languages: English

Document Type: Software Review

Grade (of Product Reviewed): B

Geographic Location: United States

FIRST LOOK column **presents** a favorable review of Rapidfile (\$395), a **single - file database** management program that includes a word processor from Ashton-Tate, Torrance, CA (800). Requires 256K, two disk drives, and runs on an IBM PC or compatible. Says that it is intended for users who need more sophisticated **database** capabilities than 1-2-3, but less power than a high-end relational **database** such as Dbase. States that it is fast and uses less memory on small systems than its competition. Drawbacks include the inability to directly access Dbase files, the lack of a **natural language query** function, and an unsophisticated word processor.

Descriptors: **DATA BASE MANAGEMENT; SOFTWARE REVIEW; WORD PROCESSING**

Identifiers: Rapidfile; Ashton-Tate; IBM PC; IBM PC Compatible

8/5/27 (Item 5 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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01649255 JICST ACCESSION NUMBER: 93A0130945 FILE SEGMENT: JICST-E

**Document Identification System for Intelligent Information Retrieval.**

TSUBOYA HISAKAZU (1); ADACHI JUN (2)

(1) Univ. of Tokyo, Faculty of Engineering; (2) National Center for Science Information System

Gakujutsu Joho Senta Kiyo(Research Bulletin of the National Center for Science Information System), 1992, NO.5, PAGE.53-68, FIG.6, TBL.3, REF.9

JOURNAL NUMBER: X0535AAK ISSN NO: 0913-5022

UNIVERSAL DECIMAL CLASSIFICATION: 002.5

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: A new method is proposed for identification of document records in bibliographic **databases**. In **databases**, documents are often specified in a format that can be found, for example, in reference list. On the other hand, in information **retrieval** system it is required to **retrieve** the **most likely record** based on insufficient information concerning a specific document given by a user. In this paper, an algorithm to cope with input error, abbreviation and special notation and a method to estimate likelihood of documents are proposed. A core system was implemented to demonstrate these algorithms with syntax analysis software which operates in accordance with this core system. A evaluation was also done, using actual bibliographic records from NACSIS **databases** and a high rate of identification was achieved with the proposed method. (author abst.)

DESCRIPTORS: information retrieval; **database**; resource(document); identification; citation research; reference literature; bibliographical description format; English; algorithm

BROADER DESCRIPTORS: retrieval; recognition; user study; investigation; data format; type; western language; **natural language**; language

CLASSIFICATION CODE(S): AC06010H

8/5/28 (Item 6 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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01193432 JICST ACCESSION NUMBER: 91A0220713 FILE SEGMENT: JICST-E

**Cooperative responses for indirect queries .**

NAKAMURA KOICHI (1); NAKAMURA AKIRA (1); TANAKA MINORU (2); ICHIKAWA TADAO (2)

(1) Hiroshima Univ., Graduate School; (2) Hiroshima Univ., Faculty of Engineering

Jinko Chino Gakkai Chishiki Besu Shisutemu Kenkyukai Shiryo(SIG-KBS), 1991 , VOL.15th, PAGE.89-96, FIG.11, REF.6

JOURNAL NUMBER: X0831ABG

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:007.51 681.3:061.68

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: In retrieval of information from a **database** , cooperative responses for **queries** are important from the view point of achieving the user's retrieval goal and preventing user's misconceptions. In this paper, we describe how to construct cooperative responses for indirect **queries** that do not have clear attributes with expected values in the response. A data model, called the action-model, is proposed. This model expresses the real world from the view point of user's actions. At the indirect, **query** level, attributes with expected values in the response are decided based on the action-model and entity-relationship model. By using values of these attributes, two kinds of cooperative responses are **returned** to the user. **One** is the **response** intending to achieve user's **retrieval** goal, and the other is the response intending to prevent misconceptions. (author abst.)

File 347:JAPIO Nov 1976-2004/Apr(Updated 040802)

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File 350:Derwent WPIX 1963-2004/UD,UM &UP=200452

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Set	Items	Description
S1	5090	NATURAL()LANGUAGE OR FREE()FORM
S2	50270	(DIRECT OR ONE OR SINGLE OR SOLITARY OR LONE OR BEST OR HIGHEST) (2W) (ANSWER OR REPLY OR RESPONSE OR RECORD OR ITEM OR ENTRY OR DATA OR FILE OR DOCUMENT OR ARTICLE OR PAGE OR WEBPAGE OR SITE OR WEBSITE OR OBJECT)
S3	8058	(MOST OR RELEVANT OR APPROPRIATE) (2W) (ANSWER OR REPLY OR RESPONSE OR RECORD OR ITEM OR ENTRY OR DATA OR FILE OR DOCUMENT OR ARTICLE OR PAGE OR WEBPAGE OR SITE OR WEBSITE OR OBJECT)
S4	11004	S2:S3(7N) (RETRIEV? OR OBTAIN??? OR PROVID? OR PROVISION OR RETURN??? OR FORWARD??? OR SEND??? OR SENT OR TRANSFER??? OR DELIVER??? OR MAIL??? OR EMAIL??? OR DISPLAY??? OR PRESENT??? OR SHOW???)
S5	14	S1 AND S4

5/5/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
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03812467 \*\*Image available\*\*  
**NATURAL LANGUAGE CONVERTER**

PUB. NO.: 04-177567 [JP 4177567 A]  
PUBLISHED: June 24, 1992 (19920624)  
INVENTOR(s): SHIRAI SATOSHI  
YOKOO AKIO  
APPLICANT(s): NIPPON TELEGR & TELEPH CORP <NTT> [000422] (A Japanese  
Company or Corporation), JP (Japan)  
APPL. NO.: 02-305421 [JP 90305421]  
FILED: November 09, 1990 (19901109)  
INTL CLASS: [5] G06F-015/20  
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 30.2  
(MISCELLANEOUS GOODS -- Sports & Recreation)  
JOURNAL: Section: P, Section No. 1435, Vol. 16, No. 493, Pg. 99,  
October 13, 1992 (19921013)

#### ABSTRACT

PURPOSE: To automatically generate the sentence of **natural language** for **showing** the contents of an article from a **one - article** portion of a heading by reflecting information of a range of block as a phrase on a generated sentence by a sentence generating means.

CONSTITUTION: The converter is provided with a sentence generating means 2 for generating a sentence by combining a character-string contained in a heading which is read in by a heading input means 1, and a character-string being appropriate in accordance with control information described in a rule table 4, and a sentence output means 3 for outputting its generated sentence, and also, provided with a mark ON/OFF switch 5 for selecting whether a mark is outputted or not, and a symbol selection switch 6 for the mark. In such a state, in accordance with a description format of an inputted heading of a newspaper and a magazine, the rule table is referred to, and by combining an appropriate character-string and a character-string contained in the inputted heading in accordance with control information described in a generated pattern designating part, a sentence is generated. In such a way, it is possible to convert automatically to a sentence of **natural language**.

5/5/2 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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015336883 \*\*Image available\*\*  
WPI Acc No: 2003-397820/200338  
XRPX Acc No: N03-317747

**Answering system for e-commerce, analyzes word and content of questions input by user and searches relevant reply message from database**

Patent Assignee: NEO GENESIS KK (NEOG-N)  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2003058464	A	20030228	JP 2002139771	A	20020515	200338 B

Priority Applications (No Type Date): JP 2001170540 A 20010606

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2003058464	A		11 G06F-013/00	

Abstract (Basic): JP 2003058464 A

NOVELTY - A server (1) analyzes a word and content of a question input by a user, by **natural language** processing and **displays** questions with high relationship. The server searches **relevant reply** message from a database (2) and **displays** the searched reply message,

when one of the displayed questions is selected.

USE - In e-commerce for answering for complaint received from customer and for providing on-line manual data, medical information and real estate information through Internet, in response to questions input by customers.

ADVANTAGE - Enables a user to select a suitable question and receive reply for the selected question easily.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the answering system. (Drawing includes non-English language text).

server (1)

database (2)

pp; 11 DwgNo 1/5

Title Terms: ANSWER; SYSTEM; ANALYSE; WORD; CONTENT; QUESTION; INPUT; USER; SEARCH; RELEVANT; REPLY; MESSAGE; DATABASE

Derwent Class: S05; T01

International Patent Class (Main): G06F-013/00

File Segment: EPI

5/5/3 (Item 2 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015138357 \*\*Image available\*\*

WPI Acc No: 2003-198883/200319

Related WPI Acc No: 2003-091978

XRPX Acc No: N03-158102

Natural language processing method in wireless communication system, involves categorizing words contained in voice request from remote terminal, based on grammar associated with words for generating structured response

Patent Assignee: ACCENTURE LLP (ACCE-N); CHE V W (CHEV-I); DEMPSEN S L (DEMP-I); PITTS A F (PITT-I)

Inventor: BURGISS M J; CHE V W; DEMPSEN S L; GAILEY M L; HOLMES C S; KING SMITH A; PITTS A F; PORTMAN E A

Number of Countries: 028 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020161587	A1	20021031	US 2001286916	P	20010427	200319 B
			US 2002131898	A	20020425	
EP 1391127	A2	20040225	EP 2002725826	A	20020426	200415
			WO 2002US13243	A	20020426	
AU 2002256369	A1	20021111	AU 2002256369	A	20020426	200433

Priority Applications (No Type Date): US 2001286916 P 20010427; US 2002131898 A 20020425; US 2001946111 A 20010904; US 2002133118 A 20020426; US 2002133536 A 20020426; US 2002133537 A 20020426; US 2002134405 A 20020426

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020161587	A1		16	G06F-017/20	Provisional application US 2001286916

EP 1391127 A2 E H04Q-007/20 Based on patent WO 200288880  
Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR  
AU 2002256369 A1 G06F-017/60 Based on patent WO 200288880

Abstract (Basic): US 20020161587 A1

NOVELTY - A voice request generated by a remote terminal (12) is transmitted to a base station (14). The words contained in the request are identified using a voice recognition application. The words are categorized based on the grammar associated with the words. A structured response is generated for the voice request using a response generation application.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for wireless communication system.

USE - In wireless communication system (claimed).

ADVANTAGE - Coupling a natural language processing application to the location based services system helps to bridge the gap between

voice recognition and processing structured requests by improving speech recognition. **Natural language** processing improves user experience by inferring through the use of linguistics, the words that were not recognized, thus enabling the resulting application to **retrieve a more relevant answer**.

DESCRIPTION OF DRAWING(S) - The figure shows a location based service providing system.

Remote terminal (12)

Base station (14)

pp; 16 DwgNo 1/6

Title Terms: NATURAL; LANGUAGE; PROCESS; METHOD; WIRELESS; COMMUNICATE; SYSTEM; WORD; CONTAIN; VOICE; REQUEST; REMOTE; TERMINAL; BASED; GRAMMAR; ASSOCIATE; WORD; GENERATE; STRUCTURE; RESPOND

Derwent Class: P27; Q21; Q35; Q46; T01; W01; W02; W05

International Patent Class (Main): G06F-017/20; G06F-017/60; H04Q-007/20

File Segment: EPI; EngPI

5/5/4 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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015078686 \*\*Image available\*\*

WPI Acc No: 2003-139204/200313

XRPX Acc No: N03-110528

**Online digital data collection method involves conducting concurrent searching of structured and unstructured data sources and preselecting data sources containing valid response to query, before submitting query**

Patent Assignee: FRIEDER O (FRIE-I); GROSSMAN D A (GROS-I)

Inventor: FRIEDER O; GROSSMAN D A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020156771	A1	20021024	US 2001837436	A	20010418	200313 B

Priority Applications (No Type Date): US 2001837436 A 20010418

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20020156771 A1 7 G06F-007/00

Abstract (Basic): US 20020156771 A1

NOVELTY - Concurrent searching of structured and unstructured data sources is performed and data sources, most likely to contain a valid response to query are preselected before submitting the query to the data sources.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for intranet mediator.

USE - For collecting digital data about specific **natural language** query through intranet.

ADVANTAGE - **Provides direct answer** to a specific **natural language** query, for the user who needs no special skills in query formulation.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of the intranet mediator architecture.

pp; 7 DwgNo 1/1

Title Terms: DIGITAL; DATA; COLLECT; METHOD; CONDUCTING; CONCURRENT; SEARCH ; STRUCTURE; UNSTRUCTURED; DATA; SOURCE; PRESELECTED; DATA; SOURCE;

CONTAIN; VALID; RESPOND; QUERY; SUBMIT; QUERY

Derwent Class: T01

International Patent Class (Main): G06F-007/00

File Segment: EPI

5/5/5 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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014980426 \*\*Image available\*\*



WPI Acc No: 2003-040941/200303

XRPX Acc No: N03-032053

**Logical agent engine e.g. for computers, where the logical agent engine serves as an intelligent database querying system for extracting knowledge to be relayed to a user via a lifelike human image**

Patent Assignee: LOGIC JUNCTION (LOGI-N); JOWELL M S (JOWE-I); KESSOCK H C (KESS-I)

Inventor: JOWELL M S; KESSOCK H C

Number of Countries: 101 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200291120	A2	20021114	WO 2002US14244	A	20020506	200303 B
US 20030023572	A1	20030130	US 2001288903	P	20010504	200311
			US 2002139487	A	20020506	
EP 1412823	A2	20040428	EP 2002731674	A	20020506	200429
			WO 2002US14244	A	20020506	
AU 2002303640	A1	20021118	AU 2002303640	A	20020506	200452

Priority Applications (No Type Date): US 2001288903 P 20010504; US 2002139487 A 20020506

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
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WO 200291120	A2	E	62	G06F-000/00	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20030023572	A1			G06N-005/00	Provisional application US 2001288903
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EP 1412823	A2	E		G05B-015/00	Based on patent WO 200291120
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Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

AU 2002303640	A1			G06F-000/00	Based on patent WO 200291120
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Abstract (Basic): WO 200291120 A2

NOVELTY - Method provides information through an intelligent agent with human appearance. When the user queries the intelligent agent, the intelligent agent queries a knowledge base to determine an appropriate response to the query. Should the knowledge base fail to **provide** an **appropriate response** to the query, the general knowledge base is then queried to determine an **appropriate response** to the query and **providing** the **appropriate response** to the query to the user via the intelligent agent.

DETAILED DESCRIPTION - INDEPENDENT CLAIM included for the following: machine readable medium; system

USE - For computers.

ADVANTAGE - Links an intelligent agent engine in software with a human like interface. In addition, provides easy access to a storehouse of information whereby a **natural language** query will return a useful result.

DESCRIPTION OF DRAWING(S) - The diagram illustrates an overview of the logical agent engine which provides for the operation of engines for powering a logical agent in accordance with the principles of the present invention

interactive engine (160)

script engine (170)

pp; 62 DwgNo 1/30

Title Terms: LOGIC; AGENT; ENGINE; COMPUTER; LOGIC; AGENT; ENGINE; SERVE; INTELLIGENCE; DATABASE; SYSTEM; EXTRACT; RELAY; USER; LIFELIKE; HUMAN; IMAGE

Derwent Class: T01

International Patent Class (Main): G05B-015/00; G06F-000/00; G06N-005/00

International Patent Class (Additional): G06F-017/00

File Segment: EPI

5/5/6 (Item 5 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014606730

WPI Acc No: 2002-427434/200246

XRPX Acc No: N02-336121

**Simplified sound input method**

Patent Assignee: XIAO S (XIAO-I)

Inventor: XIAO S

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CN 1182233	A	19980520	CN 96114718	A	19961107	200246 B

Priority Applications (No Type Date): CN 96114718 A 19961107

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
CN 1182233	A		G06F-003/023	

Abstract (Basic): CN 1182233 A

NOVELTY - The present invention belongs to the field of information industry and especially is **one** computer **data** input and output method. The **present** invention aims at realizing quasi-language natural man-computer conversation, quasi-hand writing natural input and fast input. The said simplified sound input method is that the **natural language** is simplified into one for computer to understand for input and at the same time several keyboard input methods may be also incorporated.

DwgNo 0/0

Title Terms: SIMPLIFY; SOUND; INPUT; METHOD

Derwent Class: T01; W04

International Patent Class (Main): G06F-003/023

File Segment: EPI

5/5/7 (Item 6 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014434511 \*\*Image available\*\*

WPI Acc No: 2002-255214/200230

XRPX Acc No: N02-197283

**Poorly formalized natural language query answering method in Internet application, involves matching translation formula with semantic header derived for domain to extract answer**

Patent Assignee: IASKWEB INC (IASK-N)

Inventor: GALITSKY B; GRUDIN M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20010053968	A1	20011220	US 2000175292	P	20000110	200230 B
			US 2001756722	A	20010110	

Priority Applications (No Type Date): US 2000175292 P 20000110; US 2001756722 A 20010110

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20010053968	A1	28	G06F-017/27	Provisional application US 2000175292

Abstract (Basic): US 20010053968 A1

NOVELTY - A graph is produced for the expected queries with respect to a domain and a semantic header is produced for each query. A translation formula is produced for the user input query and matched with the headers to extract answer.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Poorly formalized domain extension method;
- (b) Query and answer tool provision method;
- (c) Computer program product for providing answer;
- (d) Computer program product for domain expansion

USE - For answering **natural language** query in poorly formalized domain during online question answering such as Internet auction.

ADVANTAGE - Allows client to interact with their customers more efficiently. The clients can create additional semantic headers that can be used to **retrieve** the **appropriate answer** for the query and also authorized expansion of the query domain.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart for creating semantic header.

pp; 28 DwgNo 3/10

Title Terms: POOR; FORMALISED; NATURAL; LANGUAGE; QUERY; ANSWER; METHOD;  
APPLY; MATCH; TRANSLATION; FORMULA; HEADER; DERIVATIVE; DOMAIN; EXTRACT;  
ANSWER

Derwent Class: T01

International Patent Class (Main): G06F-017/27

File Segment: EPI

5/5/8 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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013861494

WPI Acc No: 2001-345706/200137

XRPX Acc No: N01-250541

**Interactive user service with multiple interfaces having natural language input facilities includes a receiver and a correlator to match received information from the interfaces**

Patent Assignee: LUCENT TECHNOLOGIES INC (LUCE )

Inventor: BALL T J; DANIELSEN P J; JAGADEESAN L J; LAUFER K; MATAGA P A;

REHOR K G

Number of Countries: 027 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 1081592	A2	20010307	EP 2000307177	A	20000821	200137 B
JP 2001166863	A	20010622	JP 2000260176	A	20000830	200140
US 6609089	B1	20030819	US 99386093	A	19990830	200356

Priority Applications (No Type Date): US 99386093 A 19990830

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 1081592 A2 E 16 G06F-009/44

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT

LI LT LU LV MC MK NL PT RO SE SI

JP 2001166863 A 49 G06F-003/00

US 6609089 B1 G06F-017/27

Abstract (Basic): EP 1081592 A2

NOVELTY - A service monitor system manages communications with the multiple interfaces using a so called look ahead in which users can input information beyond what is currently required by the interactive service. The service monitor matches received information from the interfaces against the information requested by the service logic and **sends** information **one item** at a time to the service logic.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a method of providing an interactive user service.

USE - In interactive services.

ADVANTAGE - Allows users to input information in **natural language** beyond that the service can currently handle.

pp; 16 DwgNo 0/5

Title Terms: INTERACT; USER; SERVICE; MULTIPLE; INTERFACE; NATURAL;  
LANGUAGE; INPUT; FACILITY; RECEIVE; CORRELATE; MATCH; RECEIVE;  
INFORMATION; INTERFACE

Derwent Class: P86; T01

International Patent Class (Main): G06F-003/00; G06F-009/44; G06F-017/27

International Patent Class (Additional): G10L-015/00; G10L-015/18;  
G10L-015/22; H04M-001/66  
File Segment: EPI; EngPI

5/5/9 (Item 8 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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013575310 \*\*Image available\*\*  
WPI Acc No: 2001-059517/200107  
XRPX Acc No: N01-044402

**Word sequence interpreting method for executing natural language application in computer system, involves interpreting pronoun as reference to one of display object, when display object is not presently selected**

Patent Assignee: L & H APPL USA INC (LHUS-N)  
Inventor: SELESKY D B  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6125342	A	20000926	US 97972861	A	19971118	200107 B

Priority Applications (No Type Date): US 97972861 A 19971118

Patent Details:  
Patent No Kind Lan Pg Main IPC Filing Notes  
US 6125342 A 20 G06F-017/27

Abstract (Basic): US 6125342 A

NOVELTY - When one of displayed objects is presently selected, a pronoun in word sequence is interpreted as reference to the presently selected displayed object. When display object is not presently selected, the pronoun is interpreted as reference to one of displayed objects, which is close to the current insertion point on the display device.

DETAILED DESCRIPTION - If the word sequence includes a noun referred by the pronoun, then the pronoun is ignored, otherwise, the displayed objects are selected for interpreting the pronoun. The objects include characters, words, sentences, paragraphs, sections, pages, and documents.

USE - For interpreting word sequence during execution of **natural language** application in computer system. And also for word processing application in computers, speech recognition application to assist users for controlling other applications through voice commands and text and for graphical system e.g. CAD application.

ADVANTAGE - Assigns specific meanings which are consistent with English, to pronouns, based on the context, thereby allowing the user to comfortably use the system with minimal variation from everyday language usage.

DESCRIPTION OF DRAWING(S) - The figure shows flow chart of steps involved in word sequence interpreting method.

pp; 20 DwgNo 4/5

Title Terms: WORD; SEQUENCE; INTERPRETATION; METHOD; EXECUTE; NATURAL;  
LANGUAGE; APPLY; COMPUTER; SYSTEM; INTERPRETATION; REFERENCE; ONE;  
DISPLAY; OBJECT; DISPLAY; OBJECT; SELECT

Derwent Class: T01; W04  
International Patent Class (Main): G06F-017/27  
File Segment: EPI

5/5/10 (Item 9 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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011728231 \*\*Image available\*\*  
WPI Acc No: 1998-145141/199813  
XRPX Acc No: N98-114884

**Information filtering method for retrieving data from document collection**

- involves writing statement defining area of interest which is used to create domain list and synonym list used for analysing scanned text

Patent Assignee: UNIV CENT FLORIDA (UYFL-N)

Inventor: DRISCOLL J R

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5717913	A	19980210	US 95368045	A	19950103	199813 B

Priority Applications (No Type Date): US 95368045 A 19950103

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5717913	A		22	G06F-017/30	

Abstract (Basic): US 5717913 A

The method involves defining an information interest as a **natural language** statement. A synonym list is created from each substantive word in the **natural language** statement. A domain list is created from the **natural language** statement. The synonym list and the domain list are combined into a filter window. A minimum threshold value is selected for the filter window.

A document is scanned in order to calculate both the number of matches between words in the synonym lists and corresponding words in the document, and the number of matches between words in the domain lists and corresponding words in the document. Those two numbers are added to form a sum value which is then divided by the total length value of the first document to form a relevancy value for the first document. If the relevancy value is less than the minimum threshold, the whole process is repeated for other documents from the database collection.

**ADVANTAGE** - Allows to filter out maximum of **relevant** text data while reducing number of non-relevant **retrievals**.

Dwg.3/7

Title Terms: INFORMATION; FILTER; METHOD; RETRIEVAL; DATA; DOCUMENT; COLLECT; WRITING; STATEMENT; DEFINE; AREA; INTEREST; DOMAIN; LIST; LIST; ANALYSE; SCAN; TEXT

Derwent Class: T01

International Patent Class (Main): G06F-017/30

File Segment: EPI

5/5/11 (Item 10 from file: 350)

DIALOG(R) File 350:Derwent WPIX

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010307421 \*\*Image available\*\*

WPI Acc No: 1995-208679/199528

XRPX Acc No: N95-163503

Natural language **appts. for image object retrieval - has image stored with natural language description that is reduced to situation elements via knowledge base and retrieved via situation descriptions**

Patent Assignee: MATSUSHITA ELEC IND CO LTD (MATU ); MATSUSHITA DENKI SANGYO KK (MATU ); MATSUSHITA ELECTRIC IND CO LTD (MATU )

Inventor: OKAMOTO S

Number of Countries: 005 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 657828	A1	19950614	EP 94119116	A	19941205	199528 B
JP 7219969	A	19950818	JP 94298453	A	19941201	199542
US 5684999	A	19971104	US 94348736	A	19941202	199750
JP 3067966	B2	20000724	JP 94298453	A	19941201	200040

Priority Applications (No Type Date): JP 94298453 A 19941201; JP 93305103 A 19931206

Cited Patents: 5.Jnl.Ref; JP 4180175; JP 5120399; JP 51089531

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 657828	A1	E	31	G06F-017/30	

Designated States (Regional): DE FR GB  
JP 7219969 A 19 G06F-017/30  
US 5684999 A 26 G06F-017/28  
JP 3067966 B2 19 G06F-017/30 Previous Publ. patent JP 7219969

Abstract (Basic): EP 657828 A

The appts for retrieving image objects includes use of **natural language** descriptions of the image. The image is described by sentences of the form 'John is coaching Mike on a bike in a park'. Such descriptions are reduced by analysis to remove or alter redundant forms such as non-root verbs. Situations are extracted by use of a knowledge data base to give extracts such as 'John is running' or 'Roadside trees'.

The user inputs **natural language** sentences that can also be reduced to base forms and compared with the database to extract related images.

ADVANTAGE - Allows appts to be accurately informed of image or images containing all or part of searched item.

Dwg.1B/13

Title Terms: NATURAL; LANGUAGE; APPARATUS; IMAGE; OBJECT; RETRIEVAL; IMAGE; STORAGE; NATURAL; LANGUAGE; DESCRIBE; REDUCE; SITUATE; ELEMENT; BASE; RETRIEVAL; SITUATE; DESCRIBE

Derwent Class: T01

International Patent Class (Main): G06F-017/28; G06F-017/30

File Segment: EPI

5/5/12 (Item 11 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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010280329 \*\*Image available\*\*

WPI Acc No: 1995-181587/199524

XRPX Acc No: N95-142516

**Data collecting equipment - collects data and required items from several users for constructing process model and data model**

Patent Assignee: IBM CORP (IBMC ); INT BUSINESS MACHINES CORP (IBMC )

Inventor: EDWARDS G E

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 6266813	A	19940922	JP 93245688	A	19930930	199524 B
US 5590360	A	19961231	US 92962764	A	19921019	199707
			US 94360195	A	19941220	

Priority Applications (No Type Date): US 92962764 A 19921019; US 94360195 A 19941220

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

JP 6266813 A 36 G06F-015/60

US 5590360 A 36 G06F-015/40 Cont of application US 92962764

Abstract (Basic): JP 6266813 A

The data collection equipment has a LAN with several terminals, each with steps for display and data input. A computer server is connected to the network and has a central data base for receiving and storing information about previously selected process or data flow. A screen on each display and a prompt to each terminal are indicated.

The information of a previously selected process or data flow from each terminal is entered into the central data base in a term of a common session. The received data is stored in a common table inside the central data base.

USE - Allows several users to input information during session.

Checks collected information later.

Dwg.1/16

Title Terms: DATA; COLLECT; EQUIPMENT; COLLECT; DATA; REQUIRE; ITEM; USER; CONSTRUCTION; PROCESS; MODEL; DATA; MODEL

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/40; G06F-015/60

International Patent Class (Additional): G06F-009/06; H04L-012/28  
File Segment: EPI

5/5/13 (Item 12 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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010245851 \*\*Image available\*\*  
WPI Acc No: 1995-147106/199519  
Related WPI Acc No: 1986-259521; 1993-103288; 1995-076501; 1996-412420;  
1996-425002; 1998-041585; 2001-449857  
XRPX Acc No: N95-115525

**Knowledge-based information retrieval system having user friendly  
operation - has visual interface and natural language interpretation  
functions, control mechanisms for browsing through database, and editing  
device for query data**

Patent Assignee: HITACHI LTD (HITA )  
Inventor: COHN D; FUJISAWA H; HATAKEYAMA A; KIUCHI I  
Number of Countries: 002 Number of Patents: 003  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5404506	A	19950404	US 86844123	A	19860326	199519 B
			US 88276384	A	19881125	
			US 92831093	A	19920210	
JP 9190453	A	19970722	JP 882609	A	19880111	199739
			JP 96326482	A	19880111	
JP 2997469	B2	20000111	JP 882609	A	19880111	200007

Priority Applications (No Type Date): JP 882609 A 19880111; JP 87297568 A  
19871127; JP 96326482 A 19880111

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5404506	A		53	G06F-015/40	CIP of application US 86844123 Cont of application US 88276384 CIP of patent US 4868733
JP 9190453	A		18	G06F-017/30	Div ex application JP 882609
JP 2997469	B2		21	G06F-017/30	Previous Publ. patent JP 1180046

Abstract (Basic): US 5404506 A

The knowledge based document retrieval system has a user input device for inputting, in response to at least one of a user's key-typing and mouse operations, a series of words. A display device outputs responses from the system and retrieved documents. A user input analyser examines the input words, and converts them into an internal query condition based on information related to various concepts. A knowledge base stores knowledge including the concepts and relations among them. The stored knowledge is represented by concept nodes and relation links forming a network of concepts. An information search device identifies concept nodes that match the internal query condition semantically, and an information **retrieval** device **retrieves** at least **one relevant document** associated with the identified concept nodes.

The user input analyser has a lexicon storing device having contents which are an edited version of the concept network, and a lexical analyser. A syntactic analyser identifies a nominal compound based on the concept nodes identified. A nominal compound interpreter maps the identified nominal compound relative to the concepts and relations of the knowledge base, and infers meaning of the identified nominal compound.

ADVANTAGE - Visual interface provides for visual interaction for local search and **natural language** interpretation provides for linguistic interaction for global search. Efficient data access.

Dwg.1/36

Title Terms: BASED; INFORMATION; RETRIEVAL; SYSTEM; USER; FRIEND; OPERATE;  
VISUAL; INTERFACE; NATURAL; LANGUAGE; INTERPRETATION; FUNCTION; CONTROL;  
MECHANISM; THROUGH; DATABASE; EDIT; DEVICE; QUERY; DATA

Derwent Class: T01

International Patent Class (Main): G06F-015/40; G06F-017/30

International Patent Class (Additional): G06F-017/28  
File Segment: EPI

5/5/14 (Item 13 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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008278460 \*\*Image available\*\*  
WPI Acc No: 1990-165461/199022  
Related WPI Acc No: 1999-246619  
XRPX Acc No: N90-128445

Digital text data e.g. natural language processing method - has  
punctuation appropriate fix-up data based on previously obtained  
data about current selection

Patent Assignee: XEROX CORP (XERO )  
Inventor: ABBOTT C  
Number of Countries: 005 Number of Patents: 005  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 370777	A	19900530	EP 89312092	A	19891121	199022 B
US 5070478	A	19911203	US 88274261	A	19881121	199151
EP 370777	B1	19990728	EP 89312092	A	19891121	199934
			EP 99100412	A	19891121	
DE 68929038	E	19990902	DE 629038	A	19891121	199942
			EP 89312092	A	19891121	
JP 3220134	B2	20011022	JP 89296002	A	19891114	200169

Priority Applications (No Type Date): US 88274261 A 19881121

Cited Patents: 2.Jnl.Ref; A3...9147; EP 230339; NoSR.Pub

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 370777	A		35		

Designated States (Regional): DE FR GB

EP 370777	B1 E	G06F-017/21	Related to application EP 99100412
			Related to patent EP 911744

Designated States (Regional): DE FR GB

DE 68929038	E	G06F-017/21	Based on patent EP 370777
JP 3220134	B2	27 G06F-017/21	Previous Publ. patent JP 2188868

Abstract (Basic): EP 370777 A

The method processes text data corresponding to a text, using a digital data processor. The data processor provides fixup data defining a sequence of one operation that would modify the text data so that the modified text data would correspond to a modified text having a correct textual type punctuational structure. The sequence defined by the fix-up data is performed. The fix-up data includes data defining a starting point within the text data, a number of text codes within the text data to be deleted, and a list of text codes to be inserted, the substep of performing the sequence comprising deleting the enumerated text codes beginning at the starting point, and inserting the list of text codes at the starting point.

A manipulation is performed on the text data prior to the providing substep. The manipulated text data corresponds to a manipulated text having an incorrect textual type punctuational structure.

ADVANTAGE - Improves text processing efficiency.



File 348:EUROPEAN PATENTS 1978-2004/Aug W02

(c) 2004 European Patent Office

File 349:PCT FULLTEXT 1979-2002/UB=20040812,UT=20040805

(c) 2004 WIPO/Univentio

Set	Items	Description
S1	10469	NATURAL()LANGUAGE OR FREE()FORM
S2	145900	(DIRECT OR ONE OR SINGLE OR SOLITARY OR LONE OR BEST OR HIGHEST) (2W) (ANSWER OR REPLY OR RESPONSE OR RECORD OR ITEM OR ENTRY OR DATA OR FILE OR DOCUMENT OR ARTICLE OR PAGE OR WEBPAGE OR SITE OR WEBSITE OR OBJECT)
S3	43050	(MOST OR RELEVANT OR APPROPRIATE) (2W) (ANSWER OR REPLY OR RESPONSE OR RECORD OR ITEM OR ENTRY OR DATA OR FILE OR DOCUMENT OR ARTICLE OR PAGE OR WEBPAGE OR SITE OR WEBSITE OR OBJECT)
S4	65147	S2:S3(7N) (RETRIEV? OR OBTAIN??? OR PROVIDE? ? OR PROVISION OR RETURN??? OR FORWARD??? OR SEND??? OR SENT OR TRANSFER??? - OR DELIVER??? OR MAIL??? OR EMAIL??? OR DISPLAY??? OR PRESENT-??? OR SHOW???)
S5	71	S1(50N)S4
S6	48	S5 AND IC=G06F
S7	37	S6 AND AC=US/PR
S8	30	S7 AND AY=(1970:2001)/PR
S9	25	S6 AND PY=1970:2001
S10	37	S8:S9

10/3,K/2 (Item 2 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01355379

Information retrieval system  
System zum Wiederauffinden von Informationen  
Systeme de recouvrement d'information  
PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216883), 1006, Oaza-Kadoma,  
Kadoma-shi, Osaka 571-8501, (JP), (Applicant designated States: all)

INVENTOR:

Naito, Eiichi, 2-31, Takigi-kuwanoki, Kyotanabe-shi, Kyoto 610-0341, (JP)  
Araki, Shoichi, 3-15-22-503, Imafuku-higashi, Joto-ku, Osaka-shi, Osaka  
536-0002, (JP)  
Kutsumi, Hiroshi, 1-4-31, Terakata-nishikidori, Moriguchi-shi, Osaka  
570-0042, (JP)  
Ozawa, Jun, 3810-2-506, Obuchi-cho, Nara-shi, Nara 631-0005, (JP)  
Maruno, Susumu, 4-4-3, Yamate-minami, Kyotanabe-shi, Kyoto 610-0354, (JP)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhauser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1156430 A2 011121 (Basic)

APPLICATION (CC, No, Date): EP 2001111883 010516;

PRIORITY (CC, No, Date): JP 2000145168 000517

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE; TR

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT WORD COUNT: 135

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200147	1340
SPEC A	(English)	200147	6461
Total word count - document A			7801
Total word count - document B			0
Total word count - documents A + B			7801

INTERNATIONAL PATENT CLASS: G06F-017/30

...SPECIFICATION of the present invention. The information retrieval system  
of FIG. 14 is a system that **returns** an **appropriate answer** to a  
user's **natural language** question by searching the past cases. This  
system is implemented by a document server, a...

10/3,K/3 (Item 3 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

01145913

Method and system for interactive messaging  
Verfahren und System fur interaktive Benachrichtigung  
Procede et systeme de messagerie interactive  
PATENT ASSIGNEE:

NMS Communications Corporation, (4072400), 100 Crossing Boulevard,  
Framingham, MA 01702-5406, (US), (Applicant designated States: all)

INVENTOR:

Guedalia Jacob L., 119 Langdon, Newton, MA. 02458, (US)  
Guedalia David, 80 Shimon Street, Beit Shemesh, (IL)  
Guedalia, Josh, 116 Shimon Street, Beit Shemesh, (IL)

LEGAL REPRESENTATIVE:

Modiano, Guido, Dr.-Ing. et al (40786), Modiano, Josif, Pisanty & Staub,  
Baaderstrasse 3, 80469 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 999685 A2 000510 (Basic)  
EP 999685 A3 030924

APPLICATION (CC, No, Date): EP 99120999 991105;

PRIORITY (CC, No, Date): US 186620 981106

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;  
LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: H04M-003/493; H04L-012/58; G06F-017/60

ABSTRACT WORD COUNT: 70

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200019	1025
SPEC A	(English)	200019	5758
Total word count - document A			6783
Total word count - document B			0
Total word count - documents A + B			6783

...INTERNATIONAL PATENT CLASS: G06F-017/60

...CLAIMS message.

14. The method of claim 10 wherein the marked up e-mail comprises a  
**natural language** e-mail.

15. A method for interactive voice response comprising the steps of  
detecting the...

...receiving the e-mail;

parsing the e-mail;

deriving voice menus based on the e-mail ;

transmitting the voice menus; and

interpreting **telephone** sounds in **response** to the voice menus.

16. The method of claim 15 wherein said e-mail includes...communication  
system of claim 27 wherein the marked up e-mail is contained within a  
**natural language** e-mail.

32. An interactive voice response system comprising:

an event engine for detecting arriving...

...parsing the e-mail;

a programming engine for programming voice menus based on the e-mail ;  
and

a sound interpreter for interpreting **telephone** sounds in **response** to  
the voice menus.

33. The interactive voice response system of claim 32 wherein said...

10/3,K/4 (Item 4 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01102662

COMPUTER ARCHITECTURE USING SELF-MANIPULATING TREES

SICH SELBST MANIPULIERENDE BAUME VERWENDENDE RECHENARCHITEKTUR

ARCHITECTURE D'ORDINATEUR FAISANT APPEL A DES ARBRES A MANIPULATION  
AUTONOME

PATENT ASSIGNEE:

Spooner, Christopher, (2875680), 5505 Potomac Avenue, N.W., Washington,  
DC 20016, (US), (Proprietor designated states: all)

Spooner, Richard, (2875690), 5505 Potomac Avenue, N.W., Washington, DC  
20016, (US), (Proprietor designated states: all)

INVENTOR:

Spooner, Christopher, 5505 Potomac Avenue, N.W., Washington, DC 20016,  
(US)

Spooner, Richard, 5505 Potomac Avenue, N.W., Washington, DC 20016, (US)

LEGAL REPRESENTATIVE:

Dendorfer, Claus, Dr. et al (85562), Wachtershauser & Hartz Tal 29, 80331  
Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 1073953 A1 010207 (Basic)  
EP 1073953 B1 030716  
WO 99054815 991028  
APPLICATION (CC, No, Date): EP 99919960 990422; WO 99US8797 990422  
PRIORITY (CC, No, Date): US 64824 980423  
DESIGNATED STATES: BE; CH; DE; ES; FR; GB; IT; LI; NL; SE  
INTERNATIONAL PATENT CLASS: G06F-009/44 ; G06F-009/45  
NOTE:

No A-document published by EPO  
LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200329	923
CLAIMS B	(German)	200329	975
CLAIMS B	(French)	200329	1071
SPEC B	(English)	200329	10377
Total word count - document A			0
Total word count - document B			13346
Total word count - documents A + B			13346

INTERNATIONAL PATENT CLASS: G06F-009/44 ...

... G06F-009/45

...SPECIFICATION generating output, as well as other computers and computing systems, and is intended to encompass **appropriate** special purpose **data** processors.

The **present** invention can be used for many applications. Examples of such applications include: a computer architecture, a **natural language** search engine for electronic data bases; a **natural language** programming language; a computer operating system; a computer problem solving system; and as an enhancement...

10/3,K/6 (Item 6 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00934764

Information processing apparatus and control method therefor  
Informationsverarbeitungsvorrichtung und Steuerungsverfahren dafür  
Dispositif de traitement de l'information et methode de controle  
PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,  
Tokyo, (JP), (Applicant designated States: all)

INVENTOR:

Jeyachandran, Suresh, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,  
Ohta-ku, Tokyo, (JP)  
Suda, Aruna Rohra, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,  
Ohta-ku, Tokyo, (JP)  
Ibaraki, Shoichi, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,  
Ohta-ku, Tokyo, (JP)  
Wakai, Masanori, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,  
Ohta-ku, Tokyo, (JP)  
Takayama, Masayuki, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,  
Ohta-ku, Tokyo, (JP)  
Fujii, Kenichi, Canon Kabushiki Kaisha, 30-2, Shimomaruko 3-chome,  
Ohta-ku, Tokyo, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. High Holborn  
2-5 Warwick Court, London WC1R 5DJ, (GB)

PATENT (CC, No, Kind, Date): EP 851384 A2 980701 (Basic)  
EP 851384 A3 991229

APPLICATION (CC, No, Date): EP 97310591 971224;  
PRIORITY (CC, No, Date): JP 96348025 961226; JP 9744525 970228; JP 9751727  
970306

DESIGNATED STATES: DE; FR; GB; IT; NL  
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G06K-015/00; G06F-003/12

ABSTRACT WORD COUNT: 160

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	9827	3962
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SPEC A	(English)	9827	44113
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Total word count - document A			48075
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Total word count - document B			0
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Total word count - documents A + B			48075
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...INTERNATIONAL PATENT CLASS: G06F-003/12

...SPECIFICATION via a keyboard, by voice or a digitizer, or may be a sentence in the **natural language** by character recognition.

When the apparatus B is a different device type from the apparatus...

...conversion may be performed either by the apparatus B or by the printer A to **obtain** the **appropriate data** format. When the apparatus B is a printer and information of the apparatus B has...

10/3,K/7 (Item 7 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00932505

~~System and method for natural language determination~~

~~System und Verfahren zur Erkennung von natürlicher Sprache~~

~~Systeme et methode pour la determination de langues naturelles~~

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road,

Armonk, N.Y. 10504, (US), (applicant designated states:

AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

INVENTOR:

Martino, Michael John, 10903 Leafood Lane, Austin, Texas 78750-3431, (US)

Paulsen, Robert Charles, Jr., 16836 Squaw Valley Lane, Austin, Texas

78717, (US)

LEGAL REPRESENTATIVE:

Litherland, David Peter (75471), IBM United Kingdom Limited Intellectual

Property Department Hursley Park, Winchester, Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 849688 A2 980624 (Basic)

APPLICATION (CC, No, Date): EP 97310090 971215;

PRIORITY (CC, No, Date): US 769842 961220

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;

MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: G06F-017/27

ABSTRACT WORD COUNT: 153

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	9826	781
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SPEC A	(English)	9826	9345
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Total word count - document A			10126
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Total word count - document B			0
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Total word count - documents A + B			10126
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INTERNATIONAL PATENT CLASS: G06F-017/27

...SPECIFICATION the r and s values in the reference and sample curves respectively.

For the denominator, **one** has

This **data** illustrates that the correlation function **provides** a viable method of determining the **natural language** of a given body of text when used in conjunction with a reference curve as...

10/3,K/8 (Item 8 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00688273

An apparatus and a method for retrieving image objects.  
Vorrichtung und Verfahren zum Wiederauffinden von Objektenbildern.  
Appareil et methode de recouvrement d'objets images.

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216880), 1006, Ohaza Kadoma,  
Kadoma-shi, Osaka 571, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Okamoto, Shusaku, 7-4-2, Korigaoka, Hirakata-shi, Osaka, (JP)

LEGAL REPRESENTATIVE:

Kugele, Bernhard et al (51545), NOVAPAT-CABINET CHEREAU, 9, Rue du Valais  
, CH-1202 Geneve, (CH)

PATENT (CC, No, Kind, Date): EP 657828 A1 950614 (Basic)

APPLICATION (CC, No, Date): EP 94119116 941205;

PRIORITY (CC, No, Date): JP 93305103 931206; JP 94298453 941201

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT WORD COUNT: 162

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	EPAB95	919
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SPEC A	(English)	EPAB95	12125
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Total word count - document A	13044
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Total word count - document B	0
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Total word count - documents A + B	13044
------------------------------------	-------

INTERNATIONAL PATENT CLASS: G06F-017/30

...ABSTRACT natural language sentence and for dividing a situation represented by the semantic structure of the **natural language** sentence into at least one situation element by referring to a situation element division knowledge...

...at least one image object corresponding to the at least one situation element; and a **retrieval** section for **retrieving** at least **one** image **object** from the image database by using the situation element as an image retrieval key. (see...

...SPECIFICATION converting the syntactic structure of the natural language sentence into a semantic structure of the **natural language** sentence and for dividing a situation represented by the semantic structure of the **natural language** sentence into at least one situation element by referring to a situation element division knowledge...

...storing at least one image object corresponding to the at least one situation element; and **retrieval** means for **retrieving** at least **one** image **object** from the image database by using the situation element as an image retrieval key.

In...natural language sentence so as to obtain an analysis frame representing a meaning of the **natural language** sentence, the analysis frame including at least one element; correlating means for correlating the at...

...another so as to define an image retrieval key representing a partial meaning of the **natural language** sentence; and **retrieval** means for **retrieving** at least **one** image **object** from the image database based on a semantic similarity between the image retrieval key and...

...natural language sentence so as to obtain an analysis frame representing a meaning of the **natural language** sentence, the analysis

... frame including at least one element; c) correlating the at least one...

...another so as to define an image retrieval key representing a partial meaning of the **natural language** sentence; and d) **retrieving** at least **one** image **object** from the image database based on a semantic similarity between the image retrieval key and...

...CLAIMS converting the syntactic structure of the natural language sentence into a semantic structure of the **natural language** sentence and for dividing a situation represented by the semantic structure of the **natural language** sentence into at least one situation element by referring to a situation element division knowledge...

...storing at least one image object corresponding to the at least one situation element; and  
**retrieval** means for **retrieving** at least **one** image **object** from the image database by using the situation element as an image retrieval key.

2...

...natural language sentence so as to obtain an analysis frame representing a meaning of the **natural language** sentence, the analysis frame including at least one element;  
correlating means for correlating the at...

...another so as to define an image retrieval key representing a partial meaning of the **natural language** sentence; and  
**retrieval** means for **retrieving** at least **one** image **object** from the image database based on a semantic similarity between the image retrieval key and...

...natural language sentence so as to obtain an analysis frame representing a meaning of the **natural language** sentence, the analysis frame including at least one element;  
c) correlating the at least one...

...another so as to define an image retrieval key representing a partial meaning of the **natural language** sentence; and  
d) **retrieving** at least **one** image **object** from the image database based on a semantic similarity between the image retrieval key and...

10/3,K/9 (Item 9 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00630463

**MULTI-LINGUAL COMPUTER PROGRAMS**  
**MEHRSPRACHIGES COMPUTERPROGRAMM**  
**PROGRAMMES D'ORDINATEUR PLURILINGUES**  
PATENT ASSIGNEE:

MICROSOFT CORPORATION, (749861), One Microsoft Way, Redmond, Washington  
98052-6399, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

JAIN, Naveen, K., 2635 236th Place N.E., Redmond, WA 98053, (US)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhauser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 669021 A1 950830 (Basic)  
EP 669021 B1 970402  
WO 9411811 940526

APPLICATION (CC, No, Date): EP 94901504 931115; WO 93US11061 931115

PRIORITY (CC, No, Date): US 976445 921113

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-009/44 ; G06F-003/023

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB97	597
CLAIMS B	(German)	EPAB97	544
CLAIMS B	(French)	EPAB97	671
SPEC B	(English)	EPAB97	2208
Total word count - document A			0
Total word count - document B			4020
Total word count - documents A + B			4020

INTERNATIONAL PATENT CLASS: G06F-009/44 ...

... G06F-003/023

...SPECIFICATION s code. This method eases translation because the messages to be translated are together in **one file** . To output a message, a program would **retrieve** the message from the **appropriate resource file** . Different resource files are used for each **natural language** . Developers create multiple **natural language** versions of the program by carrying out the following steps: 1) create a new resource file by translating the messages in an existing resource file into a desired **natural language** ; 2) compile the new resource file; and 3) create an executable file by linking the...

10/3,K/10 (Item 10 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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00522928

Database retrieval system for responding to natural language queries with corresponding tables

Datenbankauffindungssystem zur Beantwortung natursprachlicher Fragen mit dazugehörigen Tabellen

Système de recouvrement de données pour répondre aux interrogations en langage naturel avec des tables correspondantes

PATENT ASSIGNEE:

MITSUBISHI DENKI KABUSHIKI KAISHA, (208581), 2-3, Marunouchi 2-chome  
Chiyoda-ku, Tokyo, (JP), (Proprietor designated states: all)

INVENTOR:

Takanashi, Ikuko, c/o Mitsubishi Denki, K.K., Johodenshi Kenkyusho, 1-1,  
Ofuna 5-chome, Kamakura-shi, Kanagawa-ken, (JP)

Kondo, Shozo, c/o Mitsubishi Denki, K.K., Johodenshi Kenkyusho, 1-1,  
Ofuna 5-chome, Kamakura-shi, Kanagawa-ken, (JP)

Suzuki, Katsushi, c/o Mitsubishi Denki, K.K., Johodenshi Kenkyusho, 1-1,  
Ofuna 5-chome, Kamakura-shi, Kanagawa-ken, (JP)

Naganuma, Kazutomo, c/o Mitsubishi Denki, K.K., Johodenshi Kenkyusho,  
1-1, Ofuna 5-chome, Kamakura-shi, Kanagawa-ken, (JP)

Itabashi, Yoshiko, c/o Mitsubishi Denki, K.K., Johodenshi Kenkyusho, 1-1,  
Ofuna 5-chome, Kamakura-shi, Kanagawa-ken, (JP)

Kimura, Chikako, c/o Mitsubishi Denki, K.K., Johodenshi Kenkyusho, 1-1,  
Ofuna 5-chome, Kamakura-shi, Kanagawa-ken, (JP)

Inaba, Naohito, c/o Mitsubishi Denki, K.K., Johodenshi Kenkyusho, 1-1,  
Ofuna 5-chome, Kamakura-shi, Kanagawa-ken, (JP)

LEGAL REPRESENTATIVE:

Pfenning, Meinig & Partner (100961), Mozartstrasse 17, 80336 Munchen,  
(DE)

PATENT (CC, No, Kind, Date): EP 522591 A2 930113 (Basic)

EP 522591 A3 931103

EP 522591 B1 000322

APPLICATION (CC, No, Date): EP 92111820 920710;

PRIORITY (CC, No, Date): JP 91171217 910711

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT WORD COUNT: 135

NOTE:

Figure number on first page: NONE



LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200012	323
CLAIMS B	(German)	200012	296
CLAIMS B	(French)	200012	408
SPEC B	(English)	200012	8386
Total word count - document A			0
Total word count - document B			9413
Total word count - documents A + B			9413

INTERNATIONAL PATENT CLASS: G06F-017/30

...SPECIFICATION The database retrieval formula is passed from the database formula generation unit 32 to the **retrieval** unit 34, which **retrieves** the **appropriate data** from the database 9. The **retrieved** data is then output to the output device 17 (Fig. 2).

The operation of the system of Fig. 6 will now be described in detail. Initially, a **natural language** query 1 "Chokoreeto rui no sengetsu no uriage ha?" (Sales of chocolates and the like...

10/3,K/11 (Item 11 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2004 European Patent Office. All rts. reserv.

00484715

**Natural language apparatus and method and construction of a knowledge base for natural language analysis.**

**Natursprachenvorrichtung und -verfahren und Konstruktion eines Wissenssystems zur Analysierung von natürlicher Sprache.**  
**Systeme et methode de traitement de langage naturel et construction d'une base de connaissances pour l'analyse de langage naturel.**

PATENT ASSIGNEE:

International Business Machines Corporation, (200120), Old Orchard Road, Armonk, N.Y. 10504, (US), (applicant designated states: DE;FR;GB)

INVENTOR:

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PATENT (CC, No, Kind, Date): EP 467527 A2 920122 (Basic)  
EP 467527 A3 930721

APPLICATION (CC, No, Date): EP 91305412 910614;

PRIORITY (CC, No, Date): JP 90155570 900615

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-015/38

ABSTRACT WORD COUNT: 184

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	741
SPEC A	(English)	EPABF1	5817
Total word count - document A			6558
Total word count - document B			0
Total word count - documents A + B			6558

INTERNATIONAL PATENT CLASS: G06F-015/38

...SPECIFICATION context data.

Figure 24 is a block diagram of a computer system for implementing the **natural language** analysing system of the present invention.

Referring first to Figure 24, an example of a computer system for implementing a **natural language** analysis system of the **present** invention comprises a processor connected to a **direct access data**

.. storage device (DASD) and a visual **display** terminal having a keyboard.  
In use, the DASD stores a computer program for configuring the computer system as a **natural language** analysis of the present invention. A user can operate the analysis system via the visual...

10/3,K/12 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00967454 \*\*Image available\*\*

**CUSTOMER MESSAGING SERVICE**

**SERVICE DE MESSAGERIE A LA CLIENTELE**

Patent Applicant/Assignee:

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(Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

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(Residence), US (Nationality), (Designated only for: US)

ARGO Ronald L, 5186 Belmore Court, Suwanee, GA 30024, US, US (Residence),

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Legal Representative:

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Suite 2800, New York, N.Y. 10111, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 2002101495 A2-A3 20021219 (WO 02101495)

Application: WO 2002US17767 20020605 (PCT/WO US0217767)

Priority Application: US 2001876563 20010607

Parent Application/Grant:

Related by Continuation to: US 2001876563 20010607 (CON)

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ

EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR

LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI

SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8778

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Detailed Description

... replies. hi yet another exaniple, a fi-equent traveler preparing for abusinesstr'

couldrequestfliglitstcrLtusinfoinationincludingthedepait-tiregateina ip

**natural language** inquiry. The CMAS engine interprets the **natural language** request, routes it to the appropriate airline, and responds with the informiation. The customer then...

...upgraded, and the CMAS engine again interprets the request, routes it to the airline and **sends** ail **appropriate response** . An aleit could also be **sent** by the airline to the frequent traveler in the event that her flight has been delayed or cancelled.

As described above, a customer may enter a **natural language** request and the CMAS engine will attempt to interpret the request. The CMAS engine will...

10/3,K/13 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00925709 \*\*Image available\*\*

**KNOWLEDGE-BASED INFORMATION RETRIEVAL SYSTEM AND METHOD FOR WIRELESS COMMUNICATION DEVICE**

**SYSTEME ET PROCEDE D'EXTRACTION D'INFORMATIONS FONDE SUR LES CONNAISSANCES POUR DISPOSITIF DE COMMUNICATION SANS FIL**

Patent Applicant/Assignee:

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CA 92121, US, US (Residence), US (Nationality)

Inventor(s):

CHERN Vincent, 11436 Holly Fern Court, San Diego, CA 92131, US,  
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TIJERINO Yuri A, 17148 Patina Street, San Diego, CA 92127, US,  
NGUYEN Justin A, 11581 Caminito Corriente, San Diego, CA 92128, US,

Legal Representative:

COYNE Patrick J (et al) (agent), Collier Shannon Scott, PLLC, Suite 400,  
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Patent and Priority Information (Country, Number, Date):

Patent: WO 200259792 A1 20020801 (WO 0259792)

Application: WO 2001US13317 20010426 (PCT/WO US0113317)

Priority Application: US 2001768305 20010125

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE  
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT  
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM  
TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 7649

Main International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description

Detailed Description

... determination device, the software agent consults with a knowledge agency comprised of specialized agents and **retrieves** a **relevant** and targeted **response** to the user's request. The agent may be configured as a conversational agent in order to carry on a friendly conversation with the user complete with **natural language** and mood control.

5

. Example Environment

Before describing the invention in detail, it is useful...

10/3,K/14 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00922974

**CREATION OF STRUCTURED DATA FROM PLAIN TEXT**

**CREATION DE DONNEES STRUCTUREES A PARTIR D'UN TEXTE EN CLAIR**

Patent Applicant/Assignee:

SOFTFACE INC, Suite 570, 2121 N. California Blvd, Walnut Creek, CA 94596,  
US, US (Residence), US (Nationality)

Inventor(s):

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MCGEER Patrick C, 50 Diablo View Road, Orinda, CA 94563, US,  
CARLONI Luca, 200 Tunnel Road, Berkeley, CA 94705, US,

Legal Representative:

SUEOKA Greg T (et al) (agent), Fenwick & West LLP, Two Palo Alto Square,  
Palo Alto, CA 94306, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200256196 A2-A3 20020718 (WO 0256196)

Application: WO 2002US757 20020107 (PCT/WO US2002000757)

Priority Application: US 2001757075 20010108

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PL PT RO RU SD SE SG SI SK  
SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 49123

Main International Patent Class: G06F-017/27

Fulltext Availability:

Detailed Description

Detailed Description

... creating structured data from a plain text query, for using this  
structured data to **retrieve relevant data** from a database. For  
example, a user's free text query can be converted to...

...and their attributes. Such a system overcomes the limitations of  
conventional search engines by accepting **free form** text, and mapping  
it accurately into a structured search query.

The present invention recognizes that...

10/3,K/17 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00904223 \*\*Image available\*\*

USER INTERFACE FOR THE ADMINISTRATION OF AN EXTERNAL DATABASE

INTERFACE UTILISATEUR / DISPOSITIF DE DIVERTISSEMENT QUI SIMULE UNE  
INTERACTION PERSONNELLE ET COMPLETE UNE BASE DE DONNEES EXTERNE AVEC  
DES DONNEES PERTINENTES

Patent Applicant/Assignee:

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Inventor(s):

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GUTTA Srinivas, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,  
MILANSKI John, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,  
PELLETIER Daniel L, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Legal Representative:

GROENENDAAL Antonius W M (agent), Internationaal Octrooibureau B.V.,  
Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200237472 A2-A3 20020510 (WO 0237472)

Application: WO 2001EP12404 20011024 (PCT/WO EP0112404)

Priority Application: US 2000699579 20001030

Designated States:

(Protection type is "patent" unless otherwise stated - for applications

prior to 2004)

CN JP KR

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 17511

...International Patent Class: G06F-017/20

Fulltext Availability:

Detailed Description

Detailed Description

... same answer. The user-interface accepts questions from a person, searches through the templates and **returns** the (or a random of the) **most appropriate answer** (or answers) corresponding to it. The technology requires the author to create the typical database; there is no initial knowledge about **natural language** in the user-interface and the systems cannot learn on their own. The systems are...

10/3,K/18 (Item 7 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00903185 \*\*Image available\*\*

ENVIRONMENT-RESPONSIVE USER INTERFACE / ENTERTAINMENT DEVICE THAT SIMULATES PERSONAL INTERACTION

INTERFACE UTILISATEUR/DISPOSITIF DE DIVERTISSEMENT S'ADAPTANT A L'ENVIRONNEMENT ET PERMETTANT DE SIMULER UNE INTERACTION PERSONNELLE

Patent Applicant/Assignee:

KONINKLIJKE PHILIPS ELECTRONICS N V, Groenewoudseweg 1, NL-5621 BA

Eindhoven, NL, NL (Residence), NL (Nationality)

Inventor(s):

ESHELMAN Larry, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

GUTTA Srinivas, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

MILANSKI John, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

STRUBBE Hugo J, Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Legal Representative:

GROENENDAAL Antonius W M (agent), Internationaal Octrooibureau B.V.,

Prof. Holstlaan 6, NL-5656 AA Eindhoven, NL,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200237250 A2-A3 20020510 (WO 0237250)

Application: WO 2001EP12408 20011024 (PCT/WO EP01012408)

Priority Application: US 2000699606 20001030

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

JP KR

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 18140

Main International Patent Class: G06F-003/00

International Patent Class: G06F-017/20 ...

Fulltext Availability:

Detailed Description

Detailed Description

... same answer. The user-interface accepts questions from a person, searches through the templates and **returns** the (or a random of the) **most appropriate answer** (or answers) corresponding to it. The technology requires the author to create the typical database; there is no initial knowledge about **natural language** in the user-interface and the systems cannot learn on their own. The systems are...

10/3,K/20

(Item 9 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT  
(c) 2004 WIPO/Univentio. All rts. reserv.

00903161 \*\*Image available\*\*

**COMPUTER BASED INTEGRATED TEXT AND GRAPHIC DOCUMENT ANALYSIS  
ANALYSE INFORMATISEE DE DOCUMENTS UNIFIES COMPRENANT DU TEXTE ET DES  
DESSINS**

Patent Applicant/Assignee:

INVENTION MACHINE CORPORATION, 133 Portland St., Boston, MA 02114, US, US  
(Residence), US (Nationality)

Inventor(s):

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DREYFUS Edward, 181 Acorn Dr., Clark, NJ 07066, US,

Legal Representative:

KUSMER Toby H (et al) (agent), McDermott, Will & Emery, 28 State Street,  
Boston, MA 02109, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200237223 A2-A3 20020510 (WO 0237223)

Application: WO 2001US46131 20011102 (PCT/WO US0146131)

Priority Application: US 2000246015 20001106; US 2001282078 20010406

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8168

Main International Patent Class: **G06F-015/00**

Fulltext Availability:

Detailed Description

Detailed Description

... drawing

display of the precise component, components, or  
functions of user's interest while omitting non- **relevant**  
**data** from the integrated graphic **display** and text **display**  
and/or audio.

Exemplary embodiment of the present invention  
includes using the software-based system...

...09/541,182, filed 04/3/00 by

the assignee hereof to semantically process the **natural**  
**language** text into subject-action-object (SAO)  
structures. Since all S's (subjects) and O's (objects)...

10/3,K/21 (Item 10 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00897536 \*\*Image available\*\*

**SMART AGENT FOR PROVIDING NETWORK CONTENT TO WIRELESS DEVICES  
ROBOT DE RECHERCHE DESTINE A LA DISTRIBUTION DE CONTENU DE RESEAU A DES  
DISPOSITIFS SANS FIL**

Patent Applicant/Assignee:

MSHIFT INC, Suite 575, 1735 Technology Drive, San Jose, CA 95110, US, US  
(Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

NDILI Awele, 2027 Wendover Lane, San Jose, CA 95121, US, US (Residence),

NG (Nationality), (Designated only for: US)

Legal Representative:

WEITZ David J (agent), Wilson Sonsini Goodrich & Rosati, 650 Page Mill Road, Palo Alto, CA 94304-1050, United States of America, US,  
Patent and Priority Information (Country, Number, Date):

Patent: WO 200231700 A1 20020418 (WO 0231700)

Application: WO 2001US30321 20010927 (PCT/WO US0130321)

Priority Application: US 2000239421 20001010

Parent Application/Grant:

Related by Continuation to: US 2000239421 20001010 (CIP)

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK  
SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 12271

Main International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description

Detailed Description

... If mobile device 920 is determined to be a Japanese formatted device, agent 950 will **direct** the network **page** to **natural language** module 926, which **retrieves** instructions from database 940. The instructions are implemented to convert the English format on the...

10/3,K/22 (Item 11 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00882977 \*\*Image available\*\*

METHOD AND SYSTEM FOR INTERACTIVELY RESPONDING TO INSTANT MESSAGING REQUESTS

PROCEDE ET SYSTEME PERMETTANT DE REpondre DE MANIERE INTERACTIVE A DES DEMANDES DE MESSAGERIE INSTANTANEE

Patent Applicant/Assignee:

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, US (Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

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HOFFER Robert, 1 East Elbrook Drive, Allendale, NJ 07401, US, US (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

SCHAFFER Robert (et al) (agent), Darby & Darby P.C., 805 Third Avenue, New York, NY 10022-7513, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200217101 A1 20020228 (WO 0217101)

Application: WO 2001US23086 20010720 (PCT/WO US0123086)

Priority Application: US 2000643262 20000822

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM EE  
ES FI GB GD GE HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV  
MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR  
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 9993

Main International Patent Class: **G06F-015/16**

Fulltext Availability:

Detailed Description

Detailed Description

... remotely located query response server 22. In practice, query response server 22 will include a **natural language** interpreter or other smart system which is capable of responding to queries and other request...

...nature related to topics within at least a specified range of issues by generating an **appropriate answer**. The **answer** generated by query response server 22 is **returned** to the message processor 12 where it is incorporated into an output message which is...

**10/3,K/23 (Item 12 from file: 349)**

DIALOG(R)File 349:PCT FULLTEXT

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00857285 \*\*Image available\*\*

**NATURAL LANGUAGE INTERFACE FOR DATABASE QUERIES**

**INTERFACE EN LANGAGE NATUREL**

Patent Applicant/Assignee:

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, US (Residence), US (Nationality), (For all designated states except:  
US)

Patent Applicant/Inventor:

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(Nationality), (Designated only for: US)  
BOONJING Veera, 39 13th Street, Apt. 1, Troy, NY 12180, US, US  
(Residence), TH (Nationality), (Designated only for: US)

Legal Representative:

RUSSAVAGE Edward J (agent), Wolf, Greenfield & Sacks, P.C., 600 Atlantic  
Avenue, Boston, MA 02210, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200190953 A2-A3 **20011129** (WO 0190953)  
Application: WO 2001US16459 20010521 (PCT/WO US0116459)  
Priority Application: US 2000205725 20000519

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ  
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL  
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 17117

Patent and Priority Information (Country, Number, Date):

Patent: ... **20011129**

Main International Patent Class: **G06F-017/28**

International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

Publication Year: **2001**



Detailed Description

... be multiple choice question format, of which a single selection of the choices is an **appropriate response**.

However, the system 1 0 1 may **present** a general query interface on graphical user interface, through which the user may pose **natural language** queries or responses to questions. For example, system 1 0 1 may prompt the user to "Please enter a search (**natural language** or keyword)." In response, the user may provide a **natural language** response, asking system 1 0 1 "Where is the Houston Field House at RPI located..."

10/3,K/24 (Item 13 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00818615 \*\*Image available\*\*

**MAN-MACHINE INTERFACE METHOD AND APPARATUS**

**PROCEDE ET DISPOSITIF D'INTERFACE HOMME-MACHINE**

Patent Applicant/Assignee:

VERBAL COMMUNICATIONS TECHNOLOGIES LLC, 3160 Lilly Avenue, Long Beach, CA 90630, US, US (Residence), US (Nationality)

Inventor(s):

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Legal Representative:

VERAVANICH Polaphat (et al) (agent), Lyon & Lyon LLP, 47th Floor, 633 West Fifth Street, Los Angeles, CA 90071-2066, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200152112 A1 **20010719** (WO 0152112)

Application: WO 2001US1097 20010111 (PCT/WO US0101097)

Priority Application: US 2000480399 20000111

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT  
TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 9753

Patent and Priority Information (Country, Number, Date):

Patent: ... **20010719**

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

Publication Year: **2001**

Detailed Description

... a wireless data transfer unit. In another embodiment, the system transmits the uttering via a **direct data transfer** unit.

It is an object of this invention to provide a more accurate and easier-to-use human-machine interface using semantically correct and complete utterings, closely paralleling **natural language** utterings.

It is a further object of this invention to assist users by giving them ...

10/3,K/26 (Item 15 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT  
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00797933      \*\*Image available\*\*

**METHOD AND APPARATUS FOR PROCESSING QUERIES**  
**PROCEDE ET APPAREIL DE TRAITEMENT DE DEMANDES**

Patent Applicant/Assignee:

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designated states except: US)

Patent Applicant/Inventor:

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Legal Representative:

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London EC1N 2TE, GB,

Patent and Priority Information (Country, Number, Date):

Patent:                      WO 200131500 A1    **20010503**    (WO 0131500)  
Application:                WO 2000GB4081 20001023    (PCT/WO GB0004081)  
Priority Application: EP 99308627 19991029

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA  
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA  
UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 9773

Patent and Priority Information (Country, Number, Date):

Patent:                      ... **20010503**

Main International Patent Class: **G06F-017/30**

Fulltext Availability:

Detailed Description

Publication Year: **2001**

Detailed Description

... not know how relevant the document is to his query. The fourth search  
facility, Whatis, **provides** a link to **single data** entries, thus  
functioning as an electronic paper dictionary, and its use is extremely  
limited.

According...method of processing a query received from a user, which  
query may be entered in **natural language**, the method comprising the  
steps of.

(i) decoding the query into one or more semantically...

10/3,K/27      (Item 16 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT  
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00764264      \*\*Image available\*\*

**SYSTEM AND METHOD FOR DOCUMENT MANAGEMENT BASED ON A PLURALITY OF KNOWLEDGE**  
**TAXONOMIES**

**SYSTEME ET PROCEDE DE GESTION DE DOCUMENTS BASES SUR PLUSIEURS TAXONOMIES**  
**DES CONNAISSANCES**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200077690 A1 20001221 (WO 0077690)  
Application: WO 2000US16444 20000615 (PCT/WO US0016444)  
Priority Application: US 99139509 19990615

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES  
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU  
LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR  
TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 31064

Patent and Priority Information (Country, Number, Date):

Patent: ... 20001221  
Main International Patent Class: G06F-017/30  
Fulltext Availability:  
Claims  
Publication Year: 2000

Claim

... taxonomic relations (at, near, under, etc.) In a query-based  
retrieval, a user specifies a **natural language** query with one or more  
taxonomy tags, one or more taxonomic restrictions, and any knowledge...

...seeks to identify matches between the query and the concept nodes in a  
taxonomy, to **provide** a faster and more **relevant response** than a  
contentbased **retrieval**, which is driven by the actual words in the  
document. Additional features and advantages of...

10/3,K/28 (Item 17 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00761431

A SYSTEM, METHOD, AND ARTICLE OF MANUFACTURE FOR PROVIDING COMMERCE-RELATED  
WEB APPLICATION SERVICES  
SYSTEME, PROCEDE ET ARTICLE MANUFACTURE DESTINES A LA FOURNITURE DE  
SERVICES D'APPLICATION DANS LE WEB LIES AU COMMERCE

Patent Applicant/Assignee:

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Legal Representative:

BRUESS Steven C (agent), Merchant & Gould P.C., P.O. Box 2903,  
Minneapolis, MN 55402-0903, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200073957 A2-A3 20001207 (WO 0073957)  
Application: WO 2000US14420 20000525 (PCT/WO US0014420)  
Priority Application: US 99321492 19990527

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT (utility model) AU AZ BA BB BG BR BY CA CH CN CR CU CZ  
CZ (utility model) DE DE (utility model) DK DK (utility model) DM DZ EE  
EE (utility model) ES FI FI (utility model) GB GD GE GH GM HR HU ID IL IN  
IS JP KE KG KP KR KR (utility model) KZ LC LK LR LS LT LU LV MA MD MG MK  
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK (utility model) SL TJ TM  
TR TT TZ UA UG UZ VN YU ZA ZW  
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG  
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW  
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 150171

Patent and Priority Information (Country, Number, Date):

Patent: ... 20001207

Main International Patent Class: G06F-017/30

International Patent Class: G06F-017/60 ...

... G06F-009/44

Fulltext Availability:

Detailed Description

Publication Year: 2000

Detailed Description

... GUI program design, the application logic is often closely linked to  
the user interface. A **single** design **document** capable of capturing  
this relationship could serve as a key input into the programming process  
...

10/3,K/29 (Item 18 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00760544 \*\*Image available\*\*

**A METHOD FOR ORDERING AN ITEM**

**PROCEDE DE COMMANDE D'UN ARTICLE**

Patent Applicant/Inventor:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200073969 A1 20001207 (WO 0073969)  
Application: WO 2000US14931 20000601 (PCT/WO US0014931)  
Priority Application: US 99137001 19990601

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

CA JP MX US

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Filing Language: English

Fulltext Word Count: 4045

Patent and Priority Information (Country, Number, Date):

Patent: ... 20001207

Main International Patent Class: G06F-151/00

Fulltext Availability:  
Detailed Description  
Publication Year: 2000

Detailed Description

... The on-line credit transaction provides immediate payment for the vendor. To the extent possible, **one object** of the subject invention is to **provide** immediate payment followed by immediate product fulfillment.

If a customer is desirous of obtaining support or assistance, the customer is categorized as requiring product support. The **natural language** conversations discussed above take place until the customer's queries are all answered.

As also...

10/3,K/30 (Item 19 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
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00747049 \*\*Image available\*\*

**SYSTEM AND METHOD FOR ACCESSING PERSONAL INFORMATION  
SYSTEME ET PROCEDE D'ACCES A DES DONNEES PERSONNELLES**

Patent Applicant/Assignee:

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SZYMANSKI Boleslaw, P.O. Box 301, Newtonville, NY 12128, US,

Legal Representative:

RUSSAVAGE Edward J (agent), Wolf, Greenfield & Sacks, P.C., 600 Atlantic  
Avenue, Boston, MA 02210, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200060435 A2-A3 20001012 (WO 0060435)  
Application: WO 2000US9265 20000407 (PCT/WO US0009265)  
Priority Application: US 99128219 19990407

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

CA JP

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Filing Language: English

Fulltext Word Count: 20722

Patent and Priority Information (Country, Number, Date):

Patent: ... 20001012

Main International Patent Class: G06F-001/00

International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description

Publication Year: 2000

Detailed Description

... be multiple choice question format, of which a single selection of the choices is an **appropriate response**. However, as **shown** in Figure 12, the system IO 1 may present a general query interface on graphical user interface 1 5 120 1, through which the user may pose **natural language** queries or responses to questions. For example, at line 1202, system IO 1 prompts the user to "Please enter a search (**natural language** or keyword)." At line 1203, the user provides a natural language response, asking system IO...

10/3,K/31 (Item 20 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT  
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00551355 \*\*Image available\*\*

**NETWORK INTERACTIVE USER INTERFACE USING SPEECH RECOGNITION AND NATURAL  
LANGUAGE PROCESSING  
INTERFACE UTILISATEUR INTERACTIVE DE RESEAU A RECONNAISSANCE VOCALE ET A  
TRAITEMENT DE LANGAGE NATUREL**

Patent Applicant/Assignee:

ONE VOICE TECHNOLOGIES INC,  
WEBER Dean C,

Inventor(s):

WEBER Dean C,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200014728 A1 **20000316** (WO 0014728)

Application: WO 99US20447 19990908 (PCT/WO US9920447)

Priority Application: US 98150459 19980909; US 98166198 19981005

Designated States:

(Protection type is "patent" unless otherwise stated - for applications  
prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB  
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD  
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US  
UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM  
AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM  
GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 9622

Patent and Priority Information (Country, Number, Date):

Patent: ... **20000316**

...International Patent Class: **G06F-017/27** ...

... **G06F-003/16**

Fulltext Availability:

Detailed Description

Publication Year: **2000**

Detailed Description

... each one of the non-noise words in the phrase (or its synonym) is  
actually **present** in the **highest** -confidence **entry** . If there are a  
sufficient number of required words actually **present** in the **highest**  
-confidence **entry** , then the flow proceeds to block 350, where the  
**natural language** processor 202 directs application interface 220 to  
take an associated action from column 408 or 410. It is understood that  
additional action columns may also be **present** .  
For example, if the **highest** confidence **entry** was the entry in row  
412A, and the boolean test of ...in row 412E (e.g., "what time is it"),  
the associated action may be for **natural language** processor 202 to  
direct a text-to-speech application (not shown) to speak the present time  
to the user through the speaker 112.

As another example, if the **highest** -confidence **entry** is that in row  
412N (e.g., " **show** me the news"), the first associated action may be to  
access a predetermined news web...

10/3,K/32 (Item 21 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT  
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00530616 \*\*Image available\*\*

**SYSTEM METHOD AND COMPUTER PROGRAM PRODUCT TO AUTOMATE THE MANAGEMENT AND  
ANALYSIS OF HETEROGENEOUS DATA  
SYSTEME, PROCEDE ET PROGRAMME INFORMATIQUE PERMETTANT D'AUTOMATISER LA  
GESTION ET L'ANALYSE DE DONNEES HETEROGENES**

Patent Applicant/Assignee:

WISDOMBUILDER LLC,

Inventor(s):

KISIEL Kenneth W,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9961968 A2 19991202

Application: WO 99US11643 19990527 (PCT/WO US9911643)

Priority Application: US 9885055 19980527

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE  
GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK  
MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU  
ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH  
CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW  
ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 13732

Patent and Priority Information (Country, Number, Date):

Patent: ... 19991202

Main International Patent Class: G06F

Fulltext Availability:

Detailed Description

Publication Year: 1999

Detailed Description

... s computer system, the present invention filters them during the  
Collection phase 104, by separating **relevant data** from irrelevant  
data.

In another embodiment, the **present** invention provides a ...  
requirements entered during the Requirements phase 102. Once the  
requirements are entered, typically in a **natural language** format, the  
present invention communicates with one or more external or internal data  
sources, such...

10/3,K/35 (Item 24 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00434753 \*\*Image available\*\*

METHOD AND APPARATUS FOR NATURAL LANGUAGE QUERYING AND SEMANTIC SEARCHING  
OF AN INFORMATION DATABASE

PROCEDE ET DISPOSITIF D'INTERROGATION EN LANGUE NATURELLE ET RECHERCHE  
SEMANTIQUE D'UNE INFORMATION DANS UNE BASE DE DONNEES

Patent Applicant/Assignee:

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Inventor(s):

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JENSEN John B,

ALLEN Bradley P,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9825217 A1 19980611

Application: WO 97US22943 19971204 (PCT/WO US9722943)

Priority Application: US 96760691 19961204

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AT AU BG BR CA CH CN CZ DE DK ES FI GB HU IL IS JP KR LC LU MK MX NO NZ  
PL PT RO RU SE SG SI SK VN YU AT BE CH DE DK ES FI FR GB GR IE IT LU MC  
NL PT SE

Publication Language: English

Fulltext Word Count: 10482

Patent and Priority Information (Country, Number, Date):

Patent: ... 19980611

Main International Patent Class: G06F-017/30

Fulltext Availability:  
Detailed Description  
Claims  
Publication Year: 1998

#### Detailed Description

... semantic content that is not represented in the metadata is not accessible to the information **retrieval** process. The unrepresented content will usually be **most** of the **data** ; ultimately, the only complete representation of the semantic content of the document is the document...

...applications, semantic

que.rying, accepts a question submitted to the information retrieval system in a **natural language** format.. A semantic analysis of the question is then used to translate the question into...

#### Claim

1 A method for searching an electronically accessible document depository to **provide** at least **one answer** to a question posed by a user in a **natural language** , comprising the steps of:

(a) identifying at least one candidate document, from said depository, that...with that verb.

1 25. A system for searching an electronically accessible document depository to **provide** at least **one answer** to a question posed by a user in a **natural language** , comprising:

(a) a parser coupled to receive:

(i) said question, and

(ii) from said depository...